

Federated States of Micronesia: Public Expenditure Analysis.

Getting ready for 2024.



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GETTING READY FOR 2024



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Abbreviation List

AA/AS	Associate Degree	LTFF	Long-Term Fiscal Framework
ADB	Asian Development Bank	M&E	Monitoring and Evaluation
BIA	Benefit Incidence Analysis	MCA	Multiple Criteria Assessment
CBA	Cost-Benefit Analysis	MRA	Micronesian Registration Advisor
CIG	Compact Infrastructure Grant	NCD	Non-communicable Disease
COM	College of Micronesia	NER	Net Enrolment Rate
CSG	Compact Sector Grant	NG	National Government
СТА	Customs and Tax	NMCT	National Minimum Competency Test
	Administration Division		
CTF	Compact Trust Fund	OI	Outer Islands
DoE	Department of Education	OIA	U.S. Office of Insular Affairs
DOFA	Department of Finance and	OOP	Out of Pocket
	Administration		
DoH	Department of Health	PEFA	Public Expenditure and Financial
	•		Accountability Assessment for the National
			Government only
DPT	Diphtheria, Pertussis, and Tetanus	PER	Public Expenditure Review
DTCI	Department of Transport,	PFM	Public Financial Management
	Communication, and		
	Infrastructure		
ECE	Early Childhood Education	PIC	Pacific Island Country
FAA	Federal Aviation	PIM	Public Investment Management
	Administration		
FMIS	Financial Management	PMO	Project Management Office
	Information System		
FSM	Federated States of Micronesia	PMU	Project Management Unit
GAO	U.S. Governance and	SBOC	Office of Statistics, Budget, Overseas
	Accountability Office		Development Assistance, and Compact
			Management
GDP	Gross Domestic Product	SDP	Strategic Development Plan
GFS	Government Finance Statistics	SG	State Government
GNI	Gross National Income	SNA	Statement of National Accounts
GoFSM	Governments of FSM (both	STR	Student-Teacher Ratio
	National and State		
	Governments)		
HIES	Household Income Expenditure	TA	Technical Assistance
	Survey		
IDP	Infrastructure Development	TF	Trust Fund
	Plan		
IMF	International Monetary Fund	USDOI	U.S. Department of Interior
IMR	Infant Mortality Rate	VAT	Value Added Tax
JEMCO	Joint Economic Management	WHO	World Health Organization
	Committee	WDI	Would Davalonment Indianters
		WDI	wond Development Indicators

Executive Summary and Introduction

1. This Public Expenditure Review (PER) is aimed at filling a knowledge gap to support the Government of the Federated States of Micronesia (GoFSM) in improving the design of public expenditure policies, working within the existing Compact and governance framework, to address these key challenges. The quantitative analysis relied on data provided by the GoFSM, audit reports, compact reports, and annual economic review data generated by the Office of Statistics, Budget, Overseas Development Assistance, and Compact Management Budget (SBOC) with technical assistance (TA) from the Graduate School USA. The PER also draws on data from the 2014 Public Expenditure and Financial Accountability (PEFA) report for the National Government (NG) only. These data sets are not exhaustive and/or some do not fully capture the national and state government breakdown. The data limitations may result in some inaccuracies and inadvertent distortions in outcomes. The main recommendations of this PER to support the GoFSM in addressing the aforementioned challenges outlined below are centered on how to (a) improve public expenditure management to support macroeconomic stability and growth and (b) improve public expenditure management to support efficient, effective, and equitable service delivery. The PER is composed of a concise set of chapters analyzing macroeconomic and fiscal trends, intergovernmental relationships, public investment management (PIM) issues, and the two largest expenditure sectors: education and health.

2. Over the past five years, the economy contracted by an average of 0.2 percent, while inflation (largely imported) remained steady, averaging 3.4 percent. The Federated States of Micronesia (FSM) has a very narrow production base, with subsistence agriculture and fisheries and the public sectors dominating the economy, both with regard to employment and value added. The contribution of institutional sectors to growth suggests that private enterprises relied on the public sector for growth opportunities and households tended to fall back to subsistence when growth slows. Growth accelerations and decelerations were largely influenced by the implementation of the U.S. funded airport upgrade project and Compact grants—although over the long run, the net effect of public investment on growth has been small. Economic growth and international competitiveness are severely constrained by the country's small size, remoteness, geographic isolation and dispersion, and thin institutional and human capacity.

Indicator	СНК	PNI	KOS	YAP
Population (2014E)	47,054	37,215	6,318	11,529
% of Total	46.1%	36.4%	6.2%	11.3%
Headcount food poverty (2013E)	15.2%	5.9%	1.6%	4.7%
% of extreme poor population	72.4%	21.1%	0.9%	5.6%
Land Area (square miles)	46.9	133.2	42.97	38.7
Population / square mile of land area	1,003	279	147	298
Number of Outer Islands (OI)	24.0	5.0	0.0	18.0
Spending per Capita	732	923	1,865	1,850
Share of Compact Receipts	42.2%	28.1%	12.2%	17.6%

Table 1. Overview of States

Source: Government of FSM (GoFSM).

Note: CHK = Chuuk; PNI = Pohnpei; KOS = Kosrae; Share of Compact Receipts decided by FSM Congress through the distribution formula

3. With a population of around 100,000, an economy of US\$318 million in FY2014, and ranking in the top decile of global remoteness indicators, the FSM is one of the smallest countries

and among the most remote in the world. At the same time, the FSM faces structural trade deficits and is vulnerable to international price fluctuations.¹ All petroleum products and a high proportion of food are imported. The rise in food and fuel prices in 2008 resulted in inflation peaking at 13 percent and current account deficits widening substantially, showing its extreme vulnerability to international commodity price shocks. The trade deficits are largely financed by official grants and fishing license fees. With limited financial infrastructure, a large portion of the Government's assets (including the assets in the various trust funds [TFs]) are invested offshore and, therefore, subject to volatility in international financial markets. Finally, the FSM is vulnerable to climate change events such as sea level rise, and its location heavily exposes the country to natural disasters such as cyclones, king tides, and droughts, with implications for current and expected future fiscal costs.

4. A host of structural factors, such as the federal structure, grant management system, and rigidity of fiscal policy, renders economic management highly complex. The FSM's federal structure implies that economic decision making is dispersed across four state governments (SGs) and one national government (NG). The need to find consensus among the GoFSM has frequently been a major roadblock to reform. In addition, the Joint Economic Management Committee (JEMCO), consisting of representatives from the FSM and the United States, also has significant influence on fiscal policy making. Under the amended Compact of Free Association (Compact), the FSM receives significant funding from the United States. The JEMCO reviews and approves grant allocations, performance objectives, and, where appropriate, assessment tools, for the upcoming year. It also reviews the development plans and other planning and budget documents of the government and monitors the progress made by the government toward sustainable economic development and budgetary self-reliance in relation to its written goals and performance measures. With no independent monetary and exchange rate policies (due to use of the U.S. dollar), fiscal policy provides the main macroeconomic policy lever. The fiscal policy framework is, however, only partially able to mitigate the effects of short-term shocks. While fixed Compact grants (prioritized to specific sectors) provide some revenue certainty in the medium term,² low domestic revenue mobilization and increasing reliance on revenue sources vulnerable to external influences may limit the scope for revenues to adapt to shocks. Similarly, with wages accounting for over half of recurrent expenditures and the important role of the public sector, there is also limited scope for expenditures to adapt to shocks. In the past, large external aid flows from the United States supported long-term macroeconomic stability, as provisioned under the Compact.

Box 1. Compact of Free Association

At the end of World War II, the United Nations created the Trust Territory of Pacific Islands and the United States accepted the role of Trustee. The FSM was under the civil administration of the U.S. Navy from 1944 to 1951. Administration authority was then transferred to the U.S. Department of Interior (USDOI) until 1986 when the FSM became independent. During that period, the FSM benefitted from U.S. investments to rebuild infrastructure and expand the provision of public services, including health and education. A sovereign country since 1986, the FSM entered into a 'Compact of Free Association' with the United States. Under the Compact, the FSM receives yearly financial transfers. The amended Compact provides U. S. support for a 20-year period that began in FY2004. Under the Compact, the FSM receives two streams of funds—Compact Sector Grants (CSGs) and contributions to the Compact Trust Fund (CTF)—that will total approximately US\$2.1 billion over the 20-year Compact period. This is equivalent to payments of US\$92.7 million per year in constant terms—US\$76.2 million is provided as sector grants, US\$0.5 million finances an annual audit, and US\$16.0 million is paid as contributions into the CTF. While the Compact has no specified termination date, the annual sector

¹ Exports averaged approximately 25 percent of gross domestic product (GDP) over the past five years, and prospects for increasing these are limited. With a narrow production base, the FSM is heavily dependent on imports, which averaged around 80 percent of GDP over the past five years.

² In the long term, when Compact grants are replaced by CTF income, revenues may become more volatile and dependent on international financial market and economic conditions, therefore less able to compensate for short-term shocks.

grants will cease in 2023, to be replaced by disbursements from the CTF from 2024. Eligibility for federal programs, the provision of U.S. services, and the open migration provision will continue beyond 2023.

The use of the CSG is guided by the Fiscal Procedures Agreement between the FSM and U.S. governments. This establishes, among others, the requirements on grant governance, disbursement, usage, and reporting. The USDOI has the fiduciary responsibility for the approval and implementation of the CSGs, through the JEMCO. The JEMCO was established to "strengthen management and accountability with regard to assistance provided under the Compact, and to promote the effective use of funding provided." The JEMCO members consist of three representatives from the United States and two from the FSM, and decisions are reached on a majority basis.

CSGs are routed through the NG, 70 percent of which fund recurrent activities and the remaining 30 percent are used for capital spending and are also known as the Compact Infrastructure Grant (CIG). CSGs are shared across SGs based on Congressional decision premised on the distribution formula, which is largely determined by population. CSGs currently finance around half of total public spending. Between FY2016 and FY2023, CSGs from the United States, which are a major source of funding in the education, health, and infrastructure sectors, are scheduled to decline in real terms due to scheduled annual decrements to the amounts of the CSGs and an inflation adjustment (set at 2/3 of the U.S. Implicit Price Deflator - IDP) which is projected to be below FSM's annual inflation—reducing resources available for service delivery. This reduction in the CSGs is offset by an annual increase in contributions to the CTF. From FY2023, income CTF assets should replace the real value of the existing CSGs. However, the CTF value is currently below the projected path to achieving this. Based on current projections, CTF income generated in FY2024 is expected to only be able to replace around two-thirds of CSGs, resulting in a fiscal cliff for the country.



Figure 1. Estimated Evolution of CTF Value and Distribution Shortfall till FY2023

Note: The target balance estimate is defined as the size the CTF will need to achieve by the end of FY2023 to support a smooth and sustainable transition from CSGs to annual CTF distributions in FY2024. This is calculated based on the scheduled contributions to the CTF and assuming a constant return. The projected balance estimate reflects the actual evolution of the CTF balance up to FY2015 and the projected CTF balance profile based on the FY2015 actual. This is calculated based on the scheduled contributions to the CTF and assuming two levels of return, as shown in the legend. The FY2023 CSG is estimated based on the Compact schedule, while total spending in FY2024 is estimated from the 2014 Debt Sustainability Analysis. Distribution from the CTF may vary depending on the financial market return, affecting the magnitude of the shortfall as well.

5. Poverty has regressed and remains concentrated in Chuuk, raising questions around the efficiency and equity of public expenditure policy. Supported by large and steady external aid flows as well as a declining population, gross national income (GNI) for the FSM grew steadily to US\$3,200 in 2014 (World Development Indicators [WDIs], atlas method), much higher than many of its Pacific peers. However, poverty and inequality worsened between FY2005 and FY2013, with 1 in 10 people in the FSM living below the food poverty line and more than 4 out of 10 not being able to afford basic daily needs. Poverty remains more prevalent, severe, and deeper in Chuuk, where half of the population resides. While many factors besides public expenditure determine poverty outcomes, sustaining poverty reduction will require the GoFSM to make sound public expenditure policy choices to improve their efficiency and equity.

6. Similarly, weak and varying human development outcomes across the country also suggest room for improving the effectiveness of public spending to support long-term economic development. In education, although enrolments are high at the primary level, only 34 percent and 22 percent of children in grade 8 achieved 'minimum competency' or above in reading and math, respectively. Performance across states varied widely. In reading, a mere 17 percent of children were minimally competent or above in Chuuk, compared to 56 percent in Kosrae. In math, performance ranged from 10 percent of children achieving minimum competency or above in Chuuk to 42 percent of children in Kosrae. In health, public health and mortality outcomes are low. Outcomes also vary across states, for example, reported immunization rates among two-year-old children range from 46 percent in Chuuk to 85 percent in Kosrae. Despite weak outcomes, public spending is high across key sectors relative to the FSM's peers—suggesting a low level of return. Improving human development outcomes across the country will in the long term support the development of the economy.

7. A summary of the recommendations from the PER is provided below, with more detail on each of these presented in subsequent chapters.

Desired Impact	Short-term Action	Medium- to Long-term Action		
Increase tax effort toward	Tax administration reforms.	Develop broader tax reform strategies,		
the regional average to	Review the tax system and	including options for sin tax.		
create fiscal space.	evaluate sin tax options.			
Establish a prudent,	Continue improvements to FSM TE governance structure investment			
transparent, and disciplined	policy, and disbursement rule complementarity with CTF.			
savings regime.				

A. Growth and Stability

8. **Macroeconomic stability is hampered by the FSM's high exposure to external shocks.** With growth prospects constrained by structural issues, the FSM faces challenges in generating sufficient domestic revenue (in 2014, tax revenue was equivalent to 12 percent of GDP) on their own to meet spending needs. At the same time, increasing dependence on revenues vulnerable to externalities can create revenue volatility, although this is currently partially dampened by steady Compact grants. Limitations regarding revenue, together with larger spending levels, by extension, imply wider public sector deficits. While pre-grant deficits typically ranged between 30 and 40 percent of GDP, in the past, this was almost entirely met through Compact grants. Given that the FSM has no domestic financial markets and limited access to international capital markets, any remaining deficits are met through the temporary creation of arrears or drawdown of reserve assets. On the other hand, surpluses (which have been achieved over the past five years) are generally saved. Prudent fiscal policy, together with the lack of independent monetary policy, resulted in fiscal outcomes not leading to inflationary pressures. Exposure to external shocks in turn requires a more prominent role for government to stabilize income and consumption.

9. Economic stability could be supported through enhanced domestic revenue mobilization and strengthening reserve asset management. With average border tax and income tax at around half of what the FSM's regional peers collect and limited excise on sin goods, a review of the current tax system may be warranted to guide the government in the broader tax reform strategies. In parallel, tax administration, including tax roll management, could be strengthened to improve tax compliance.3 Improving domestic revenue mobilization will create fiscal space and reduce reliance on revenue

³ A pilot program supported by Pacific Financial and Technical Assistance Center to improve tax compliance has resulted in significant increase in collections. Under this pilot, national cigarette tax collection has, for example, increased by over 100 percent compared to the previous calendar year, and aggregate collection was up US\$1.8 million (or around 1 percent of total spending) over the same period. More broad-based reforms to increase the tax-to-GDP ratio from 12 percent toward the level achieved by regional peers could help further fill the fiscal gap.

sources vulnerable to external shocks. For saved revenues, the GoFSM should ensure they are governed adequately, with clear disbursement rules, for example, to supplement any shortfalls from CTF distributions and ensure macroeconomic stability.

Efficient, Effective, and Equitable Service Delivery

Efficient Service Delivery

Desired Impact	Short-term Action	Medium- to Long-term Action		
Strengthen wage bill	Automate payroll systems and	Streamline public sector policies across		
management and systems to	undertake a review of public	the states and sectors and for different		
improve service delivery and	administration, including size,	functions including uniform		
minimize leakages.	efficiency, and HR management.	performance standards.		
Improve value for money of	Improve the procurement process,	Improve the evaluation framework and		
public expenditure and	contract implementation, and	transparency of other recurrent		
reduce inefficient spending.	inventory controls, including for	expenditures, including transfers to the		
	medical supplies.	passport revolving fund.		
Better inform policy makers	Strengthen the central statistical agency, with the NG providing technical			
and create more awareness	support where needed on data collection across all sectors.			
and scrutiny among citizens	Publish and disseminate	Publish and promote state performance		
to improve spending	summarized budget on platforms	indicators, including health and		
efficiency.	easily accessible by the public.	education sector outcomes.		
Strengthen infrastructure	Undertake robust need analysis	Ensure participation of stakeholders,		
project prioritization to	for sectors and states to strengthen	especially the private sector, in the		
maximize return and sustain	screening criteria and	preparation and review of development		
growth.	prioritization approach.	plans.		

10. Given the importance of the public sector to the economy, improving the quality of core public expenditure, such as the wage bill, is important to providing efficient service delivery. The wage bill accounted for over half of recurrent spending in FY2014 or 25 percent of GDP. Although it has remained flat in nominal terms and declined as a share of GDP, it continues to be significantly higher compared to other economies in the Pacific. For example, the FSM's wage bill as a share of GDP is roughly double that of Tonga, which has a similar population size. This may be interlinked with the duplication of some functions across the GoFSM and the institutional and governance arrangements. Despite the relatively high proportion of resources devoted to wages, performance of the public sector remains modest, and outcomes in key sectors are weak. In addition, the manual payroll system takes up a significant portion of public servants' time and results in inadvertent leakages. This makes improving the performance of the public sector and containing and possibly reducing wage bill expenditures in real terms a concern for the government.

11. To this end, the GoFSM could strengthen wage bill management and systems to improve service delivery and minimize leakages. In the short term, automation of payroll information systems could support improved oversight and control of the public sector wage bill and reduce unproductive use of public servants' time.⁴ In addition, a broader review of public administration, including size, efficiency, and human resource management, will shed light on future reform areas for consideration. These include potentially streamlining payroll policies across the states and for different functions to eliminate any misalignment in pay levels, tailoring human resource needs to meet changing organization of service delivery, and unifying performance standards and incentive or accountability requirements. Addressing some of these areas will support improved efficiency of the public sector and service delivery in the medium to long term.

⁴ Reducing the wage bill, for example, by 3 percent through minimizing leakages such as overpayment is equivalent to around

12. **Similarly, efficiency of other recurrent expenditures should be evaluated.** Other recurrent expenditures accounted for around 40 percent of recurrent spending in FY2014 or around 20 percent of GDP and experienced modest growth over the past five years. Bucking the overall trend, expenditures on purchases of medical supplies and unspecified other government expenditure rose significantly between FY2009 and FY2014. Expenditures under this category include, among others, subsidies to the social security, payments to nonpublic schools, contributions to the passport revolving fund, Micronesian Longline Fishing Company loan repayment, and scholarship grants. The efficacy of these expenditures is not clear. Similarly, while the cost of purchasing medical supplies rose, sporadic shortages of medicines continued. Recent performance audits highlighted, for example, weaknesses in the procurement process which may hinder the efficiency of these expenditures for service delivery.

13. **Improving procurement and the evaluation framework could be one avenue to reduce inefficient spending.** Improving the procurement process, contract implementation, and inventory controls for pharmaceutical and medical supplies will ensure the receipt of quality goods on time and at the lowest costs.⁵ In the long run, improving the evaluation framework and transparency of other recurrent expenditures, including ad hoc transfers, could strengthen accountability and maximize return on government investments and reduce inefficient spending.

14. **Options to better incentivize performance could also be considered to improve spending efficiency.** In the short term, citizen participation and provider accountability could be improved through (a) the publication of summarized budget information and dissemination of this information on platforms that are easily accessible by the public and (b) the publication and promotion of key state performance indicators to create more awareness and scrutiny among citizens and competition among the SGs.⁶ Improving publicly available data on inputs, outputs, and outcomes across the governments will also support the future analysis and design of policies. In the medium term, broader options to incentivize outcomes, such as output-based targeted transfers where a separate portion of resources may be held back and distributed only when key performance indicators are met, could be considered. In the social sectors, performance indicators could focus on access to services, for example, enrolments in schools and access to preventive and promotive health services. This will not only provide an incentive for governments to improve their performance and monitoring but also provide an indicator that is visible to the wider public for scrutiny.

15. **Finally, infrastructure projects could be better prioritized to maximize return and sustain medium term growth.** The FSM has invested a large amount of resources in infrastructure in the last 7–8 years and despite recent declines, public capital spending overall has been much higher in the FSM than its Pacific Island peers. The composition of infrastructure investment was largely in line with the priorities of the Infrastructure Development Plan (IDP). Going forward, the arrangements of the Compact may have serious implications for capital spending after 2024. More specifically, since public investment is a discretionary form of spending, it is more sensitive to cuts than recurrent expenditure when government is confronted with a fiscal gap. A balanced approach is therefore recommended in the short to medium term with a more realistic pace of infrastructure spending and in-parallel fixing of current weaknesses in the public investment management (PIM) system. More specifically, the GoFSM could undertake a more robust needs analysis for sectors and states to strengthen infrastructure project screening criteria and its prioritization approach.7 This will help maximize return on investment and smooth economic cycles and support sustained growth.

⁵ Recent audit reports suggest that improving pharmaceutical procurement practices could result in savings equivalent to around 1 percent of spending without adversely affecting service delivery.

⁶ The GoFSM has already begun to implement recommendation part (a) through the dissemination of annual fiscal and economic updates through the DoFA website.

⁷ The GoFSM could consider adopting a needs-based mechanism for allocation of capital spending for infrastructure projects. In particular, a sound approach and capacity for robust project appraisal are critical for allocative efficiency improvement. In

Equitable	Resource	Allocation
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Desired Impact	Short-term Action	Medium- to Long-term Action		
Move toward a needs-based	Review division of	The GoFSM undertakes a review of the		
approach to resource	responsibilities (clarify areas of	transfer formulae, in consultation with		
allocation across all sectors	overlaps and gaps) through the	the USDOI, including options for		
and states to better meet	relevant bodies.	better incentivizing performance.		
development needs.				
Strengthen planning and	Further unify the chart of	Design and build GFS for the health		
budget execution to support	accounts, map the chart of	and education sectors and incorporate		
budget effectiveness and	accounts to the GFS, and link	elements of standard health and		
government policies.	FUNDWARE across the states.	education GFS.		

Note: GFS = Government finance statistics.

16. The current transfer system and institutions may be encouraging a supply-driven service delivery model that does not adequately address imbalances and leads to inefficiencies. As noted earlier, there are large differences in development outcomes across the states and sectors, which may be attributable to differences in resource availability, geography, system quality, and so on. Furthermore, expenditure allocation is currently interlinked with Compact grant allocation and national priorities. However, the current revenue sharing arrangement, while being very simple and transparent, does not take into account the differences in the fiscal capacity across states. For example, one SG may be able to raise more revenues from their own sources due to factors such as differences in population, wealth, and so on. Therefore, the current system does not adequately correct for different vertical imbalances across the states. Furthermore, the analysis of economic performance, development outcomes, and efficiency issues across sectors highlights the different challenges faced by each of the states as well as potentially unmet horizontal imbalances. Efforts to address this may however be constrained by the reliance on CSGs, which are allocated across the states based on a relatively static, largely population-based formula and prioritized for specific sectors. This may also be inadvertently contributing to a supply-driven service delivery model, leading to inefficiencies. Across the education sector for example, an index of relative cost to graduate a student in year 12 is computed and highlights different needs and efficiency issues across states. Relative to Kosrae (the most efficient state according to the index), it costs around 190 percent more to graduate a student in Chuuk, followed closely by Yap (170 percent more) and Pohnpei (50 percent more). Weaknesses in the public financial management (PFM) system and limited transparency, accountability, and incentives may also be exacerbating the challenge of allocating resources efficiently and equitably.

17. To better meet different development needs across the country, resource allocation could be strengthened through a review of the various distribution formulae. The GoFSM could undertake a review of the distribution formulae for the CSGs and, in consultation with the USDOI, FSM may wish to consider a review of the CSG guidelines. The goal would be to move to a more flexible needs-based approach, in turn ensuring allocative efficiency. For example, in other countries, the transfer formula is often designed to take into account population (size of service delivery needs), the proportion of the population in poverty (which will need additional resources), GDP per capita (wealthier states should be able to raise more own resources), dispersion (which will cost more to deliver services), and tax effort (to remove distortionary incentives). The transfer formula is then typically embedded in a medium-term fiscal framework and adjusted periodically based on performance.

18. **Planning and budget execution could be improved to support budget effectiveness and government policies.** To improve the credibility of the budget and fiscal discipline, the GoFSM could consider strengthening the Financial Management Information System (FMIS) in the short term,

the long term, the strategic focus of the identification or prioritization of infrastructure projects can also be improved with advice from independent experts and active participation of the concerned stakeholders, especially the private sector.

including further unifying the chart of accounts across the states, mapping the chart of accounts to the GFS, including in the health and educations sectors,⁸ and linking the systems across the GoFSM to improve oversight and budget execution. These will in turn help reduce the large number of supplemental appropriations and ensure that the budget is an effective tool for implementing government policies. Improving coordination, planning, budgeting, and reviewing transfer mechanisms will in the long term provide confidence that future CTF income will be allocated efficiently and potentially support the FSM to transition toward a more autonomous resource allocation decision framework.

Desired Impact	Short-term Action	Medium- to Long-term Action
Identify areas of inefficient	Undertake health and education	Evaluate options for improved
spending to reduce cost and	sector analysis focused on	organization of service delivery, for
redeploy resources as	efficiency of large spending	example, how best to organize hospital
needed to improve service	categories, for example, high	and clinics and associated resources.
delivery.	administrative costs.	
Improve education system	Diagnosis learning and teacher	Build capacity for school-based
quality and outcomes.	training needs through	management, support learning needs,
	implementation of early grade	and enhance school autonomy.
	learning assessments and	
	classroom observations	
Improve health system	Diagnose factors underlying low	Evaluate the potential to localize
quality and outcomes.	maternal, child, and immunization	preventive and promotive health
	services coverage.	services.

Effective Social Sector Investments

19. Return on investment is low in the social sectors and spending effectiveness could be improved to enhance long-term economic development. Public expenditure on health and education is high in the FSM, in comparison with peer island states and has remained steady. While access is moderate, school enrolments have not translated into learning, with a very large share of children unable to meet national learning standards. The return on education investments is thus low. Similarly, in the health sector, performance on public health and child and maternal mortality outcomes, relative to that of its peers, indicates a low return on its health investments. In addition, payments into the health system and contributions to publicly funded insurance schemes are also low. The large differences in health and education per capita spending across states are also striking, with the smaller states of Yap and Kosrae spending significantly more than the other two. These may be related to the supply-driven, input-based approach to service delivery and, together with the weak outcome indicators in some pockets, suggest the need to investigate how best to organize service delivery in these sectors. Furthermore, state and local authorities responsible for the organization and management of service delivery provide limited reporting on performance and the use of resources, and there is very limited concept of paying for performance. The anticipated decline in financial resources for the social sectors, implied by the 2023 expiration of CSGs, which finance the bulk of spending needs, underscores the importance of improving value from current investments.

20. To this end, the GoFSM should evaluate how best to organize service delivery to meet the needs of the population. While being cognizant of the different geography and capacity across the

⁸ In the health and education sectors, a full GFS will show expenditures by function and further disaggregate these by economic classification. Functional classification for health in a complete GFS includes medical products, appliances, and equipment; outpatient services; hospital services; public health services; and health research and development. For education, the classifications are preprimary and primary, secondary, postsecondary non-tertiary, and tertiary education, as well as education not definable by level, subsidiary services to education, education research, and development. Economic cross-classifications are compensation of employees, consumption of fixed capital, interest, and social benefits. If developing a full GFS is not feasible, one step forward will be to collect data on functional classifications and then build the system in a phased approach.

states, the GoFSM should evaluate the current service delivery organization model of closely placing facilities to beneficiaries. Especially in light of depopulation in some states, weak performance of remote schools and the tendency for citizens to bypass nonhospital facilities that are close by in favor of hospitals. A needs-based resource allocation model should then follow service delivery needs. This will also help clarify whether the large share of resources currently earmarked for administrative activities—resources that do not go directly to schools or specific health facilities or programs—is needed. If not, this expenditure could be rationalized or reoriented to improve sector outcomes.

21. The GoFSM could holistically strengthen education system quality and accountability. The regressivity of current education spending reflects the population of out-of-school children who primarily come from the lowest consumption households. Further work is needed to understand what keeps these children out of school and confirm whether indirect and opportunity costs of education pose a significant constraint. In secondary education, enrolments could be improved, first through improved learning at the primary level, to motivate and enable children to stay in the system after completing primary school. Possible steps toward improving this⁹ could include, in the short term, a diagnosis of learning needs through implementation of early grade learning assessments and classroom observations, which will inform teacher training and skill building. Strengthening provider accountability in the medium term will require building the capacity of schools to plan and implement the key responsibilities of identifying priorities to support learning needs and managing and targeting resources accordingly. This could be followed by enhanced autonomy to allow for school-level decision making. The success of such school-based management also requires improved availability of information and creation of mechanisms for participation of parents and other stakeholders at the school level. Second, to the extent that secondary schooling is seen as a means to access higher education and better-paid jobs, secondary school enrolments are unlikely to improve unless returns to schooling are perceived to rise, which highlights the importance of aligning secondary education with economic opportunities and needs for skills.

22. In the health sector, the GoFSM should focus on strengthening primary and preventative health care. In the health sector, a possible first step is improved provision of public health services to address issues such as low reported immunization rates (in Chuuk in particular) and maternal and child care services. In the medium term, localization of preventive and promotive health services may also improve the quality of public health services, but costs and benefits need careful examination in relation to local capacity in each state. Tobacco and alcohol taxation will also help control chronic disease risk factors in the FSM, thereby reducing the cost burden of the sector. In the long term, the GoFSM should also explore options for more sustainable and equitable health financing mechanisms. Improving social sector outcomes and building human capital will support the FSM in long-term economic development.

23. Going forward, more specific design option papers, such as on intergovernmental transfers, could be prepared if there is interest and demand from the authorities. As opposed to being a simple choice among a list of possible modalities, reforming any governmental system is an intricate process that must fully consider the country context in its design, including the political economy context, fiscal positions, and technical capacity at the various levels of government. Rather than providing a full analysis of the potential modalities, this PER seeks to present a brief overview of some of the options for strengthening the FSM's fiscal framework as a basis for launching dialogue among all stakeholders, including development partners.

⁹ Improving the quality and accountability of the systems that currently affect more than 90 percent of the children at both primary and secondary levels could lead to improvements in quality of education and in turn address the enrolment and equity challenges, as people respond to higher private returns to (higher quality) schooling by coming into the system.

I. Macroeconomic and Fiscal Trends

1.1 Introduction

1. This first chapter analyzes macroeconomic and fiscal trends to assess the overall fiscal policy direction and identify any emerging challenges. In the context of declining Compact Sector Grants (CSGs) since FY2004 and the scheduled end to Compact grants, which may not be fully replaced by the Compact Trust Fund (CTF) income, this chapter provides an overview of recent macroeconomic and fiscal developments and sustainability. More specifically, this chapter aims to document recent revenue and expenditure trends. Both functional and economic composition of expenditure have been analyzed across time and compared to stated policy objectives to ascertain allocative efficiency. Economic composition of expenditure has been analyzed across time with a focus on recurrent versus nonrecurrent expenditure and wage versus nonwage expenditure. Benchmarking has been conducted where possible to provide the government with information on fiscal indicators of its peers. The objective of this chapter is to assess the overall fiscal policy direction and identify any emerging challenges as well as areas of potential reforms that could support the GoFSM in strengthening its long-term fiscal sustainability.

2. The quantitative analysis relies on data from the Office of Statistics, Budget, Overseas Development Assistance, and Compact Management (SBOC) and the audit reports and is constrained by data limitations. Without a fully uniform chart of accounts across the states and the chart of accounts not mapping to the international GFS standards, the analysis relied on annual economic review data generated by the SBOC with technical assistance (TA) from the Graduate School USA and annual audits compiled by the National Audit Office, limiting the accuracy and comparability of the analysis. There may be inconsistencies in the data recorded by the government compared to the data recorded by the USDOI and Graduate School USA, which may also hamper the accuracy of the analysis. Notably, the SBOC was restructured into separate departments in 2015, with statistics now reporting to the Department of resources and development, budget now reporting to the Department of finance and administration, and overseas development assistance and compact management reporting to the president's office.

1.2 Recent Economic Performance

3. Between FY2009 and FY2014, the economy contracted by an average of 0.2 percent and growth acceleration and deceleration were largely influenced by the implementation of the airport upgrade project and the CIG. While the international economic conditions remained adverse in FY2009, a surge in construction and the airport renovation funded by the U.S. Federal Aviation Administration (FAA) resulted in a return to positive growth in the economy. Growth continued in FY2010 as a result of further injection of funds from the FAA projects and a pickup in CIG use. After several years of fiscal consolidation, public administration also returned to a period of growth in FY2010 and the economy expanded by 3.2 percent overall. These trends continued to exert themselves in FY2011, although good performance in fisheries replaced public administration as a source of growth. With the windup of the FAA stimulus, the economy remained flat in FY2012 and contracted by 3.4 percent in FY2013, the worst economic performance in the past decade. This trend continued in FY2014 due to challenges in the implementation of the CIG.

4. The main sectors that drove growth between FY2009 and FY2014 are fisheries and construction. Value added from fisheries (domestic fleet) grew between FY2010 and FY2012. , reflecting the increased value of fish caught. However, FY2013, due to fishing vessels having to undergo repairs, the value added from this source declined significantly before recovering in FY2014. Construction growth experienced between FY2009 and FY2011 was largely tied to the FAA project,

which also saw a lagged effect on the retail and wholesale sectors. As the project began winding up in FY2012, these sectors also contracted.

5. **Contribution to growth by institutional sectors suggests that private enterprises relied on the public sector for growth opportunities and households tend to fall back to subsistence when growth slows.** The public sector (including public enterprises) constitutes around 40 percent of GDP and growth contribution was flat between FY2009 and FY2014. Private enterprises contribute around 20 percent of GDP, and private enterprise growth coincided with the public investment cycle, suggesting that private enterprises relied on the public sector for growth opportunities. Interestingly, households' contribution to GDP (at around 30 percent) and growth were countercyclical to private sector activities, indicating that they fall back on own resources or subsistence when the private sector contracts. Structural issues such as high transportation costs, internal dispersion, and lack of economies of scale may be binding constraints to economic growth and may in turn limit tax potential under the current setup.



Figure 2. Contribution to Real GDP Growth (Percent)









Source: 2014 FSM Economic Review, produced by TA from Graduate School USA.

6. **Macroeconomic stability has also been hampered by exogenous factors.** Inflation is largely imported, with around three-quarters of all food and almost all fuel imported. The global food and fuel crises resulted in inflation peaking at 13 percent in FY2008. In more recent years, inflation rates remained steady, averaging 3.4 percent between FY2010 and FY2014. Food prices, both imported and domestic, have been a major driver of inflation rates. Given the high level of import dependency, the FSM also faces a structural trade and current account deficit. Current account deficits averaged 14 percent of GDP in the last decade. With no central bank and the use of the U.S. dollar, monetary policy

cannot be used to stabilize the economy during times of shock, and fiscal policy is the main lever for the GoFSM to manage shocks.

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	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014
Real sector			(annual per	cent change)	1	
Real GDP	1.0	3.5	1.8	-0.5	-3.6	-3.4
Chuuk	4.7	0.5	-1.0	-3.4	-4.7	0.0
Kosrae	4.9	-1.3	7.9	8.2	-15.0	-9.0
Pohnpei	-0.3	5.5	2.4	-1.9	-1.7	-1.5
Yap	4.8	-1.6	-0.1	0.6	-4.0	-4.3
Consumer prices	7.7	3.7	4.3	6.3	2.1	0.7
Employment	0.0	3.0	17	-2.6	-2.0	0.1
Public (incl. public enterprises)	1.8	5.9	1.7	-2.0	-2.0	1.4
Private	-1.8	7.1	-0.4	-0.8	-0.7	-1.4
Naminal and a sec	2.1	2.7	5.6	-1.0	1.0	4.5
Nominal wages	4.0	2.7	0.4	3.8	1.0	0.0
Public-private wage ratio	2.2	2.2	2.1	2.0	2.0	2.2
Consolidated government finance			(in perce	nt of GDP)		
Revenue and grants	65.8	68.2	65.3	66.8	63.6	58.8
Tax revenue 2/	11.3	12.2	12.5	12.2	13.0	12.2
National share (% of total)	39.0	39.8	43.5	44.7	49.2	65.5
State share (% of total)	61.0	60.2	56.5	55.3	50.8	34.5
Other revenue	9.9	9.5	8.6	11.2	14.6	17.9
National share (% of total)	85.5	79.9	81.9	85.8	84.7	90.6
State share (% of total)	14.5	20.1	18.1	14.2	15.3	9.4
Grants	44.6	46.5	44.2	43.4	36.0	28.7
National share (% of total)	42.9	49.5	47.5	50.5	38.6	24.6
State share (% of total)	57.1	50.5	52.5	49.5	61.4	75.4
Expenditure	63.8	67.5	65.4	65.3	59.8	53.9
Current	47.3	47.1	45.4	44.5	45.7	45.5
of which: Wages and salaries	23.1	23.0	21.9	21.0	22.0	22.1
National share (% of total)	26.3	26.5	26.3	26.9	25.8	24.2
State share (% of total)	73.7	73.5	73.7	73.1	74.2	75.8
of which: Purchase of goods and services	19.9	19.1	18.6	18.9	17.8	18.7
National share (% of total)	40.6	40.4	37.5	39.1	38.2	54.1
State share (% of total)	59.4	59.6	62.5	60.9	61.8	45.9
Capital	16.5	20.3	20.0	20.8	14.1	8.4
National share (% of total)	89.2	90.9	92.6	90.5	88.8	85.6
State share (% of total)	10.8	9.1	7.4	9.5	11.2	14.4
Overall balance	2.0	0.7	-0.1	1.5	3.8	4.9
National	1.9	1.2	0.8	3.0	4.5	7.2
Chuuk	0.9	-0.5	0.4	-0.1	0.1	-0.3
Kosrae	0.1	0.0	-0.1	0.1	0.1	-0.4
Ponnpei Var	-0.4	-0.1	-0.7	-0.5	-0.5	-1.0
тар	-0.5	0.1	-0.3	-0.9	-0.4	-0.0
Compact Trust Fund (millions of U.S. dollars)	138.3	177.2	198.5	257.3	319.0	380.9
Balance of payments (in millions of U.S. dollars)						
Trade balance	-127.0	-128.4	-134.0	-125.7	-131.1	-114.6
Net services and income	-33.8	-29.8	-32.5	-25.8	-11.7	-11.0
Private and official transfers 2/	108.4	113.8	111.2	110.3	111.1	107.1
Current account including official transfers	-56.2	-49.3	-63.1	-50.4	-45.5	-32.5
(in percent of GDP)	-20.3	-16.8	-20.4	-15.5	-14.5	-10.2
Gross reserves (in months of imports)	5.2	4.0	3.9	3.5	3.9	3.9
External debt (in millions of U.S. dollars: end of pe	eriod) 3/					
Stock	84.6	84.3	87.1	87.4	86.8	83.6
(in percent of GDP)	30.4	28.5	28.1	26.8	27.5	26.3
Debt service	3.9	4.4	5.0	5.1	5.9	5.1
(in percent of exports of goods and services)	6.3	6.3	6.7	5.3	6.7	5.5
Nominal GDP (U.S. dollar millions)	278.5	295.6	310.4	325.8	315.7	318.1

Sources: FSM authorities, the International Monetary Fund (IMF), Graduate School USA and staff estimates. *Note:* 1/ Fiscal year ending September 30. Estimates for FY2012 and projections for FY2013 are preliminary and based on data received

from the authorities. 2/ Excludes one-off captive insurance revenue derived through the initial public offering of Alibaba in FY2014. 3/ Government and public enterprise debt only.

1.3 Fiscal Trends

7. **Fiscal trends in the past decade have been characterized by general expenditure restraints and increasing revenues.** In the past decade, recurrent revenues have generally seen an upward trend in both nominal and real terms. Tax revenues rose on the back of higher corporate taxes collected through the captive insurance industry. Nontax revenues have also risen since 2010 on the back of increasing fishing license fees, contributing to the overall increase in recurrent revenue. Recurrent expenditure generally stayed flat in nominal terms between FY2004 and FY2014, declining in real terms. This is partly explained by the fact that a significant portion of recurrent expenditure is funded through the CSG, which has also declined in real terms. With capital expenditure largely funded through the Compact Infrastructure Grants (CIG), the recurrent surpluses achieved have translated to overall surpluses in recent years.

8. **The composition of expenditure has been stable since FY2009.** Around three-quarters of the budget is recurrent expenditure, with the remaining quarter spent on capital projects. Recurrent expenditure tends to be rigid, with around 60 percent used to fund wages and salaries (including professional and contractual services). A further 30 percent of recurrent expenditure is used to purchase goods and services, with the remaining funding transfers and other expenditures. The capital budget is dominated by Compact and donor-funded projects. Grants (mostly Compact) financed an average of around 60 percent of the budget between FY2009 and FY2014, with domestic revenues funding the remainder of the budget. The capital budget is almost entirely funded by the CIG, which declined significantly in FY2013 and FY2014 due to factors including the absence of an updated Infrastructure Development Plan (IDP), among others.



Source: 2014 FSM Economic Review, through TA from Graduate School USA.

9. The composition of revenue has shifted significantly since FY2009 toward revenue sources vulnerable to external shocks. Excluding US\$20 million one-off captive insurance revenues derived through the Micronesian Registration Advisors (MRA) in FY2014, tax revenues have remained steady, averaging around 19 percent of total revenues.¹⁰ Nontax revenues, including fishing license fees,¹¹

¹⁰ For this analysis, one-off corporate taxes derived through the captive insurance scheme in FY2014 are not included in the analysis of recurrent revenue trends, given their one-off nature, which distorts the overall picture.

¹¹ The FSM is a member of the parties to the Nauru Agreement and receives license fees for vessel days sold to distant water fishing nations. The eight parties to the Nauru Agreement (PNA) and Tokelau, in recent years have initiated a more strategic management of tuna resources with higher economic returns for member countries through the Vessel Day Scheme (VDS). The VDS limits purse seine fishing access to the waters of the PNA members and allows transferability and greater flexibility in access terms. Under the scheme, the member countries set the total catch limit needed to maintain a healthy fish stock and translate that catch into individual vessel fishing days which are allocated to member countries by the PNA Office based on an agreed formula, the countries then sell the days. As a result of the introduction of the VDS and subsequently a minimum

increased from around 15 percent of total revenues in FY2009 to over 30 percent of total revenues in FY2014. Grants remain the largest sources of revenue although dependence on grants has declined in recent years—grants to total revenues fell from around 68 percent in FY2009 to 50 percent in FY2014.



Source: 2014 FSM Economic Review, through TA from Graduate School USA.

10. The resulting fiscal surplus has been largely put away into the FSM Trust Fund (TF) although debt servicing continues to rise in parallel. The government has acted prudently in saving recent surpluses and has built up the balance of the FSM TF to around US\$60 million by end-2014. In parallel, total debt outstanding and debt servicing have also continued to increase owing to new loans contracted largely for infrastructure purposes and expiration of grace periods on existing loans. While the current debt stock is moderate relative to GDP, the government has in parallel accumulated about US\$120 million in the unused CIG. This would suggest an opportunity to better coordinate funding to priority projects to minimize cost and meet its service delivery obligation.

Revenue Trends

11. With structural issues affecting tax potential, the FSM receives a small and declining portion of revenues from taxes collected. Tax revenues (excluding the one-off MRA receipt in FY2014 from the initial public offering of Alibaba) remained flat at around 12 percent of GDP in the past five years to FY2014. Corporate taxes collected mainly through the captive insurance industry,¹² account for an increasing proportion of tax revenues—16 percent in FY2014. Without this, taxes collected would have declined as a share of GDP. In FY2014, trade taxes accounted for 21 percent of tax revenue, wage and salary taxes accounted for 21 percent of tax revenue, and the sales and turnover taxes accounted for over 40 percent of tax revenues, providing the main sources of tax revenue.

benchmark price, access fees are estimated to have increased by at least a multiple of four between 2009 and 2015 this has resulted in FSM experiencing. a structural increase in fishing revenues..

¹² With the introduction of the captive insurance industry, which began operating in the FSM in FY2009, receipts from the MRA have increased significantly, and collections through the MRA rose to around US\$27 million in FY2014 on the back of a one-off payment. Tax on the MRA and fishing license fees are kept by the NG and not shared with the states.



Source: 2014 FSM Economic Review, through TA from Graduate School USA.

12. Figure 11 indicates the FSM's relatively weak tax effort in comparison to its neighbors, which the GoFSM recognized as an issue. Relative to the size of the economy, the FSM collects around half of the taxes that other neighboring economies (including those much smaller in size) collect. Recognizing this as an issue in light of the 2023 transition and longer-term fiscal sustainability, the GoFSM attempted to undertake reforms, including the introduction of the value added tax (VAT) to broaden and improve the progressiveness of the tax base.¹³ However, these reforms failed in obtaining the required passage of the relevant legislation by all states and have been repealed. Other alternatives to enhance tax collection could be made through a combination of strengthening tax administration, compliance, and/or increasing rates that will support sustained or improved service delivery, in light of declining CSGs and limited growth prospects. Further details on potential measures to improve the tax system can be found in annex 1.



Figure 12. PIC Average Applied Tariff Rate



Source: Data from authorities, IMF, the World Trade Organization, and World Bank staff calculations. *Note:* PIC = Pacific Island country.

The hollow bar in figure 11 depicts potential additional tax revenues which will be achieved through broadened tax base and strengthened tax administration as estimated by the IMF as part of previous efforts to introduce the VAT and the Unified Tax Authority.

13. **The FSM's tax rates for both income and trade are low in comparison to other PICs.** The income tax rate is 6 or 12 percent depending on income levels, with a tax-free threshold of US\$5,000. Gross revenue tax is US\$80 on the first US\$10,000 and 3 percent thereafter and applied across all businesses although there has been a recent change to exempt some inputs (business wages and salaries and social security contribution). Figure 13 shows that the top income bracket for the FSM is among

¹³ Earlier analysis by the IMF suggested that reforms to broaden the tax base and improve compliance could increase collections by 4 percent of GDP, which will bring the FSM's tax efforts much closer to its neighbors.

the lowest in the region. Import tariffs are relatively low with five bands (3, 4, 25, 30, and 50 percent). Few import items are subject to high rates of import duty (25–50 percent). The rates for food products and general merchandise are 3 and 4 percent, respectively. The average applied tariff rate is around half that of its regional peers. Tax on tobacco is set at US\$0.005 per cigarette, while liquor tax is set between 25 percent and 30 percent. Figure 65 highlights that the FSM receives very little in the form of taxes on tobacco.



Figure 13. PIC Tax Income Thresholds (Income Level in Local Currency Units)

Source: Data from authorities, IMF, and World Bank calculations. RMI = Republic of Marshall Islands

14. The 2014 Public Expenditure and Financial Accountability (PEFA) report for the National Government (NG) only suggested some potential weaknesses in the FSM's overall tax administration system. The FSM operates a relatively simple domestic tax system. However, there do not appear to be any regulations supporting the relevant laws, and the absence of regulations affects the clarity of procedures. The quality and transparency of tax collection vary across the GoFSM. Tax administration is also hindered by overlapping jurisdiction of national, state, and municipal laws and collection bodies. The 2014 PEFA report for the NG noted that ineffective incentives exist for ensuring voluntary compliance with tax registration and declarations, and there are weaknesses in risk assessment for both tax and customs and limited capacities for undertaking comprehensive tax audits. There are no systematic tax awareness and education campaigns, and tax information is not available in other languages. Uncollected arrears are high, amounting to US\$18 million outstanding, while the average collection ratio is low. Finally, there are no independent processes for appealing tax decisions.

15. The PEFA report for the NG also identified areas that the main tax administration office could strengthen. The Customs and Tax Administration Division (CTA) of the NG is responsible for the collection of all shared revenues and national revenues and has field offices in each state. Local taxes are collected by each state's tax departments. All taxpayers of direct and indirect taxes administered by the CTA are supposed to register with one of the CTA's field offices, where their details are entered into the tax roll. Each field office maintains its own tax roll in a manual system (spreadsheet), and there are no systemic links between the information in the field offices and no systematic sharing of information between the business (gross revenue tax) and personal income taxes managed by the CTA and the wage-based social security taxes collected by the Social Security Administration. The CTA field offices are mandated to ensure that they are maintaining a complete list of businesses for identifying, detecting, and correcting the nonpayment of taxes that are due. However, there are no systematic checks in place to ensure that all relevant taxpayers are on the tax roll. There are no direct linkages with any government business registration databases and no systematic indirect reconciliation mechanisms, such as checks of local newspapers, to identify unregistered potential taxpayers to supplement taxpayer registration system controls. A performance audit on the CTA also

found that the tax rolls were incomplete and that the CTA does not actively identify new taxpayers but instead uses a listing of taxpayers who made payments the prior year. It also found that no other procedures were undertaken to identify new taxpayers who are not filing returns.

Expenditure Trends

16. **Recurrent expenditure as a share of GDP remained steady at about 46 percent of GDP between FY2009 and FY2014.** The share of recurrent expenditure funded through grants continues to decline, falling from 64 percent in FY2009 to under 50 percent in FY2014. The large share of recurrent expenditures, funded through CSGs that are declining, influenced the relatively level trend in recurrent expenditures. Wages (including professional and contractual services), which account for 60 percent of recurrent expenditures, have been contained between 25 and 28 percent of GDP since the beginning of the amended Compact, owing to the implementation of employment and wage controls for many years.¹⁴ Purchase of goods and services, which accounts for a further one-third of recurrent expenditures, has remained largely unchanged at around 15 percent of GDP. Other expenses, including subsidies and transfers, have however increased slightly over recent years. Recurrent expenditure is high as a share of GDP, compared to its neighbors.

Figure 14. PIC Recurrent Expenditure to GDP



Figure 15. Funding Source - Recurrent Expenditure



Source: 2014 FSM Economic Review, through TA from Graduate School USA, IMF, and World Bank calculations.



Figure 16. PIC Wage Bill Trend - Population to Wages as a Share of GDP

Source: 2014 FSM Economic Review, through TA from US Graduate School, IMF, Household Income Expenditure Survey (HIES), and World Bank calculations.

17. **The proportion of resources devoted to wages is high.** The wage bill accounted for 56 percent of recurrent spending in FY2014 or 25 percent of GDP. Although the wage bill has remained flat in

¹⁴ Inclusion of professional and contractual services, due to data limitations, may inadvertently result in inaccuracies.

nominal terms and declined as a share of GDP, it continues to consume a significant proportion of resources.¹⁵ However, compared to Tonga, for example, which has a similar population size, the amount of public resources devoted to wages is half that of the resources devoted to wages for the FSM. This may be interlinked with the duplication of some functions across the GoFSM given the institutional and governance arrangements and the geographical dispersion of the country. Partial information suggests that of the amount spent on wages and salaries in FY2014, around 20 percent was spent in the education sector and 15 percent in the health sector. In addition, of the total employees from the NG, SGs, municipals, and government agencies, around one-third are employed by the education sector and a further one-sixth by the health sector with the remainder in public administration and other areas.¹⁶ The relatively high proportion of resources devoted to wages enhances inefficiency of service delivery.

18. **Despite the relatively high proportion of resources devoted to wages, later chapters show that performance of the public sector remains modest, and outcomes in key sectors are weak.** This makes improving the performance of the public sector and containing or possibly reducing wage bill expenditures in real terms a concern to the government.

19. In addition, the manual payroll system takes up a significant portion of public servants' time to administer and results in inadvertent leakages. Based on interviews undertaken with authorities, the use of a manual payroll and human resource management system absorbed a significant portion of public servants' time on tasks such as signing off pay slips. The 2012 performance audit also found weakness in the integrity of the payroll system, particularly in payroll records management and controls, which resulted in significant overpayments to active employees for hours not authorized and not requested and wrongful payment to terminated employees. These payments were also not detected or corrected by the relevant departments. Automation of human resource and payroll information systems could support improved oversight and control of the public sector wage bill and reduced unproductive use of public servants' time.



Figure 17. Relative Wage of Public Sector Employees to Average Household Income, 2013

Source: 2014 FSM Economic Review, through TA from Graduate School USA, IMF, HIES, and World Bank calculations.

20. A comprehensive review of public administration could help identify avenues to help bring the size of the wage bill more in line with its regional peers and improve public service

¹⁵ As is the case in many small fragile states, high unemployment rates and the scarcity of private sector jobs place pressure on the public sector to absorb excess labor. This reality, combined with the political economy setting, often results in jobs being framed as rent (World Bank Policy Research Working Paper Public Sectors in the Pacific Islands (WPS7102) Horsecroft 2014 and contributes to the large share of resources devoted to wages.

¹⁶ As noted in various sections of the document, data issues constrained more in-depth analysis, including those on the public sector, for example, unclassified expenditures in the health sector.

performance. From a wage bill management perspective, the institutional structure results in fragmentation of payroll policies across the states and for different functions. A public administration review, including size, function, and human resource management, will help identify potential areas of inefficiency. The analysis of the 2014 Household Income and Expenditure Survey (HIES) shows, for example, that public sector employees across all states earn more than the private sector. In fact, NG employees located in the states earn around double that of SG employees and four times more than private sector employees, and they are typically ranked among the top 20 percent income group. Another issue in civil service (33 grades and pay levels in addition to those employed on higher salaries under special service contracts¹⁷) without clearly distinguished job grading differentials. These may suggest potential misalignment in pay levels, which could be better anchored to living standards and required skills. In addition, under the freeze of the nominal wage, most heads of government units have stopped performance evaluation of their staff because there is no way to reward good performers. A revitalized uniform performance evaluation system that fairly awards good performers and removes nonperformers could support improved public service delivery.¹⁸

21. **Despite flat growth in spending on the purchase of goods and services, the expenditures on medical supplies continued to increase.** Purchase of goods and services accounted for around 30 percent of recurrent spending in FY2014 or around 15 percent of GDP. Despite the level trend of spending on goods, the cost of medical supplies continued to increase while sporadic shortages of medicines continued. Performance audits in 2014 and 2015 highlighted, for example, weaknesses in the procurement process for pharmaceutical and medical supplies, which did not allow for the receipt of quality goods on time and at the lowest costs. It also found weaknesses in contract implementation and inventory controls. Overall, this would suggest the need for greater consideration on how to improve the value for money, that is, make the existing dollar stretch further, in procurement of medical supplies and inventory management process to improve the efficiency of the system and service delivery.

22. Other recurrent expenditures, including government transfers, rose by 25 percent between FY2009 and FY2014. Other expenditures accounted for around 10 percent of total recurrent expenditures or around 5 percent of GDP. Expenditures under this category include, among others, subsidies to the social security, payment to nonpublic schools, contributions to the passport revolving fund, Micronesian Longline Fishing Company loan repayment, and scholarship grants. Given that the FMIS is not mapped with the GFS codes and cannot be aggregated, the actual trend on these expenditures may be obscured. Improving transparency of these expenditures will ensure accountability and maximize return on government investments.

1.4 Sectoral Resource Allocation

23. Total expenditure has declined in real terms, driven by declines in social and economic and infrastructure spending. Total social sector spending declined by around 2 percent per year in real terms between FY2009 and FY2014. Given that over 80 percent of spending in these sectors is funded by CSGs, this is largely a reflection of the decline of CSGs in real terms. Total economic and infrastructure spending declined by around 6 percent per year during this period, reflecting the decline in the use of the CIG. On the other hand, total spending on justice, finance and administration, and other sectors grew by between 1.5 percent and 2 percent per year during this period. Compared with the composition of expenditures in Samoa (a strong economic performer in the region), total spending on

¹⁷ Nominal wage was frozen as an expenditure control policy in the past years. Special service contracts were introduced to mobilize skilled workers without violating the nominal wage freeze.

¹⁸ The Asian Development Bank (ADB) is providing TA support to undertake a functional review of government units, strengthen corporate planning and linkage to resource allocation, revitalize performance management and streamline pay structure, and integrate special service contract and exempt positions into the public service system.

social sectors and administration was higher in the FSM while total spending on economic and infrastructure sectors was lower in more recent years (more detailed analysis on capital expenditure can be found in chapter 3).



Source: Data from authorities, Graduate School USA, World Bank estimates, Samoa Public Expenditure Review 2013. *Note:* Some discrepancies may exist due to the lack of GFS classification in the FSM's FMIS.

Box 2. Six-Part Strategy for Transition and Accelerated Growth

- 1. **Macroeconomic stability.** Maintaining fiscal stability and responsibility through the initial transition period of the amended Compact; maintaining essential public services and protecting the public investment program; and implementing tax reform in support of the growth strategy
- 2. **Good governance.** Improving effectiveness and efficiency of the government; protecting essential services through the transition; improving public sector management; enhancing accountability; and ensuring the rule of law and safeguarding property rights
- 3. **Developing an outward-oriented, private sector-led economy (competition policy).** Improving the regulatory regime; promoting domestic and foreign investment; enhancing entrepreneurial skills and opportunities; and reducing inefficiencies of the public enterprise sector
- 4. **Investing in human resource development.** Protecting health expenditure levels and improving health outcomes; health financing for the future; protecting education expenditures and improving education outcomes; and linking higher education and skills development to the needs of a growing economy
- 5. **Investing in infrastructure.** Protecting investment levels through the transition; learning from the past and targeting critical needs within the growth strategy; and long-term financing of economic infrastructure
- 6. **Long-term sustainability.** Environmental concerns integrated into the growth strategy; social and cultural factors protected during the growth strategy; intergenerational equity supported by the CTF

24. **Expenditure allocation is interlinked with Compact grant allocation and national priorities.** The national road map for development is detailed in the FSM Strategic Development Plan (SDP) 2004–2023. The SDP aims to provide a strategy for transition to the post-2023 period (see Box 2 for details). The SDP is longer in its time horizon and is interwoven with the Compact resource allocation. Resource or expenditure allocation is in turn based on the SDP and interlinked with sectoral distribution of CSGs. Although resource allocation tends to be in line with national priorities, the decline in spending for social sectors and economic and infrastructure sectors is inconsistent with the SDP priorities. Furthermore, in many other countries, national priorities tend to be updated at regular intervals to reflect changing circumstances, priorities, and achievements. As the plan has never been updated, it is not known if the current expenditure allocation is consistent with the latest national priorities for development.

1.5 Budget Execution

25. **Analysis of the budget is difficult.** The following section provides an analysis of budget execution for the general fund budget, given data limitations on the externally funded budget and its execution. The FMIS (FUNDWARE) is used across the NG and the SGs. However, the chart of accounts is not coded according to the GFS and is inconsistent across the states. As a result, it is difficult to obtain an accurate economic and functional description across the GoFSM or in-year reporting. The use of the U.S. Generally Accepted Accounting Principles system, where unused funds this year are counted as revenue next year, also clouds the ability for analysis of budget execution and reduces budget credibility. Congressional capital projects are also not normally appropriated with the budget but through supplementary appropriations during the year, making a comprehensive analysis of budget execution difficulty.

26. The aggregated revenue and expenditure outturn deviate significantly from the original and final budgets, suggesting weakness in the original budget formulation and supplementary appropriations. Between FY2009 and FY2014, on average, the actual revenue outturn deviated from the original budget by 17 percent each year. This is largely due to inaccurate revenue projections associated with fishing license fees. The expenditure outturn, on the other hand, was tracked closely to original budget figures, with the average outturn deviating from the original budget by an average of 3 percent each year. Overall trends in both revenue and expenditure execution also suggest scope to strengthen the planning process underlying the original budget formulation and supplementary appropriations.

	2009	2010	2011	2012	2013	2014
Original revenue projection	50.9	52.2	59.4	63.7	66.9	111.6
Final revenue projection	48.6	54.8	59.1	70.0	77.1	111.9
Variance to original budget	5%	5%	1%	10%	15%	0%
Revenue outturn	60.7	62.0	58.9	75.2	85.1	118.6
Variance to original budget	19%	19%	1%	18%	27%	6%
Original expenditure projection	55.2	55.2	65.1	70.4	71.9	72.0
Final expenditure projection	59.1	62.5	73.6	80.2	90.1	78.5
Variance to original budget	7%	13%	13%	14%	25%	9%
Expenditure outturn	55.1	60.1	62.6	70.5	74.1	74.8
Variance to original budget	0%	9%	4%	0%	3%	4%

Table 3. Budget Execution (US\$, millions, unless otherwise specified)

Source: FSM Audit Reports, domestic sources and uses only.

27. **Supplemental appropriations are numerous and not well executed, suggesting the potential to strengthen this process.** Each year, numerous supplemental appropriations are passed. In FY2013, for example, 11 supplemental appropriations were passed, totaling US\$15.9 million or a 22 percent upward adjustment to the original budget. The final budget between FY2009 and FY2014, on average, deviated from the original budget by around 15 percent. However, the revised budget was generally not well executed at the aggregate level with, on average, 11 percent difference between the expenditure outturn and revised budgets. In fact, at the aggregate level, the expenditure outturn tracks much closer to the original budget. This raises questions about the quality of budget planning—the linkage to GoFSM policies, transparency, and accountability.

28. Weaknesses in planning and internal controls have contributed to the large variance in expenditure composition across departments. The credibility of the budget as a policy document is undermined when deviations at the department level are large. This is typically a result of

underspending or overspending and the reallocation of resources between ministries or budget categories within the year causing deviations from planned expenditure allocation and policy direction. As noted earlier in the chapter, at the line department level, variances in the composition of primary expenditures across budget heads exceeded 15 percent, with weaknesses in planning and internal controls being a contributing factor.

1.6 Fiscal Sustainability

29. The GoFSM has prudently saved recent surpluses; however, the fiscal situation is expected to tighten in the medium term. Despite budget execution weaknesses identified in the earlier section, the GoFSM has acted prudently in saving recent surpluses, derived from higher fishing and reinsurance revenues. The 2014 Bank-Fund Debt Sustainability Analysis further projects, in the baseline, the achievement of overall fiscal surpluses in the medium term. Surpluses are, however, expected to turn into deficit from FY2024 as a result of the expected cessation of CSGs, which are not expected to be fully replaced by income earned on TF assets. The resulting fiscal gap will lead to either an unsustainable debt situation or a reduction in services. This highlights the importance of increasing fiscal space in the medium term and continued prudence in saving surpluses to buffer against future shocks, including natural disasters and potential non-communicable disease (NCD)-related upward pressures on the budget.

30. **Policy makers in small developing states face a key fiscal policy choice—building fiscal buffers to enhance resilience to shocks versus funding for development spending.** When a government expands fiscal space by accumulating public savings instead of financing spending for development needs, it foregoes a rate of return on the associated public investment. The opportunity cost of building fiscal buffers can be used to assess the optimal mix between building fiscal space and capital spending. Estimates suggest that the opportunity cost of building fiscal buffers is high for the FSM, given the many development challenges facing the country.¹⁹ Econometric analysis by the IMF also suggests that the effect of public investment on growth is stronger in Asia and Pacific small states, consistent with their large development needs. However, return on public investment in the FSM has been low in the past, and increasing capital expenditure through expanding the deficit and increasing public debt to beyond 30 percent of GDP could negatively affect growth. Unlike many other countries, the FSM has a backlog and pipeline of CIGs that could be devoted to infrastructure investment. The GoFSM should aim to ensure the use of the CIG for projects that offer the highest rate of economic and social return (see chapter 3 for details).

31. **Managing reserve assets with clearly established objectives, governance structure, and disbursement rules will ensure that these funds are used appropriately to best meet the needs of the country.** In recent years, the government has made an effort to save revenues, such as those from the captive insurance and fisheries industries, in line with international best practice. However, the 2015 audit on the FSM TF, where recent surpluses have been saved, found weaknesses in its governance. These include (a) the lack of a board of trustees as required by law; (b) the lack of timely reporting on the TF status and operating results; (c) the lack of timely reconciliation and proper maintenance of accounts; and (d) transfers from the general fund to the TF without allotment as required by law. In addition, it is not clear if the investment strategy is appropriate for the objective of the TF. Finally, a clearly specified disbursement rule, particularly around how the FSM TF could supplement CTF disbursement, will be critical to support a smooth 2023 transition. To this end, the GoFSM has already taken steps to improve select aspects of FSM TF governance through amendment of the FSM TF Act.

¹⁹ IMF. 2015. "Strengthening Fiscal Frameworks & Improving the Spending Mix in Small States." Working Paper WP/15/124.

1.7 Conclusion

32. The analysis found that although the GoFSM has been prudent in saving surpluses over the past several years, the 2023 transition remains a major challenge to achieving long-term sustainability, and creating fiscal space remains key. More than halfway through the SDP 2004– 2023, the government has made limited progress on the Six-Part Strategy for Transition and Accelerated Growth. The economy, including the private sector, has contracted. Growth may have been constrained by structural issues, which also affects domestic revenue potential. Despite this, and weaknesses in budget execution, the GoFSM has achieved surpluses in recent years on the back of fisheries and reinsurance revenues. However, fiscal sustainability remains a challenge in light of the 2023 transition, and creating fiscal space remains critical. To this end, the GoFSM could consider options to improve collection and management of resources as well as increase the efficiency of public spending. Core actions and next steps are laid out below and more details are provided in the conclusion.

	Desired Impact	Short-term Actions	Medium- to Long-	Lead Agency(s)
			term Actions	
Improve	Increase the tax-to-	Strengthen tax	Develop broader tax	DOFAs, CTA
collection	GDP ratio toward the	administration.	reform strategies,	
and	regional average.	Review the tax system;	including options for	DOFAs, TA, or
management		evaluate sin tax	sin tax.	contractor
of resources.		options.		
	FSM TF sustainably supplements CTF distributions from 2024.	Continue improvements to FSM TF governance structure, investment policy, and disbursement rule complementarity with CTF.		DOFAs, state governors, TA, or contractor
Improve	Strengthen the	Embed the LTFF	Strengthen the process	DOFAs, state
allocative	effectiveness of the	exercise in the annual	for supplemental	governors
efficiency.	budget as a tool for	planning and budgeting	appropriations.	
	resource allocation.	process.		
Improve	Reduce wage bill as a	Automate payroll	Streamline public	PSC, Treasury,
technical	share of GDP and	systems and undertake	sector policies across	state governors
efficiency.	increase public	a review of public	the states and for	
	service performance.	administration,	different functions,	
		including size,	including uniform	
		efficiency, and HR.	performance	
			standards.	

Table 4.	Core	Actions	and	Next	Steps
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Note: DOFA = Department of Finance and Administration; LTFF = Long-term Fiscal Framework; PSC = Public Service Commission.

33. In light of the 2023 transition challenges, fiscal space could be created through increased tax effort toward the regional average. Increasing tax collected as a share of GDP may be possible in the short term through addressing identified tax administration weaknesses, including better management of the tax roll, to improve compliance. Pilot programs to improve compliance are already yielding fruit. With average border tax and income tax at around half of what the FSM's regional peers collect, a review of the current tax system may be warranted to assess their appropriateness. The review could guide on broader tax reform strategies, including, for example, the excise tax on tobacco—which is currently significantly lower than regional peers—and could support the reduction of NCDs and the burden of health care costs.

34. **This could be complemented by improved resource management.** Several weaknesses have been identified in the governance of the FSM TF, where recent surpluses have been deposited. This may adversely affect its ability to ensure savings are managed adequately to buttress against future shocks. As such, continued improvements to FSM TF governance structure, investment policy, and

disbursement rule complementarity with CTF, may be warranted in the medium term to maximize income earned on these reserve assets and help fill any fiscal gap.

35. **Planning and budgeting could be improved to support greater allocative efficiency of public spending and ensure that needs are met.** Budget execution is difficult to gauge given data issues; however, aggregated revenue and expenditure outturns deviate significantly from the original and final budgets, suggesting weakness in the original budget formulation and supplementary appropriations. The planning process could, for example, be strengthened though embedding the LTFF into the annual planning and budgeting process across all governments. The numerous supplemental appropriations, which are not well executed, suggest the potential to strengthen this process in the long term, so that the budget becomes a more effective tool for policy implementation. Greater allocative efficiency could also be gained by moving toward a needs-based approach and more coordination between governments. This, together with options to increase allocative efficiency within key sectors is discussed in more detail in the following chapters.

36. Technical efficiency could be improved through strengthened public sector management, which will also support the creation of fiscal space. In the short term, strengthening the integrity of the payroll system, including through automation of payroll records management and controls, will support improved oversight and control of the public sector wage bill and reduce the potential for leakages. It could also minimize the high administration and unproductive use of public servants' time for activities such as signing off pay slips. In the medium term, after a broader review of public administration, the GoFSM could consider, among others, streamlining payroll policies across the states and for different functions, which will eliminate potential misalignment in pay levels and a lack of uniform performance standards and incentive or accountability requirements. This will support improved effectiveness of the public sector and service delivery in the medium to long term. In addition, value for money could be improved through strengthened procurement and evaluation practices, as discussed in detail in later chapters.

II. Intergovernmental Relationships

2.1 Introduction

37. A federation which is heavily reliant on Compact transfers, the FSM has a unique governing structure that further complicates fiscal management. The federation structure presents challenges for decision making, building consensus, and implementing GoFSM reforms or programs. With the bulk of service delivery responsibilities resting on the SGs, and largely funded through Compact transfers, the NG often acts as a conduit amid the policy discussion between the United States and the SGs. This presents further challenges for decision-making expenditure management. The 2023 transition has prompted many questions among stakeholders on the appropriateness of the current institutional arrangement and how intergovernmental relationships could be improved to meet imbalances and promote effective management of public resources.

38. This chapter aims to evaluate the existing institutional framework and how it can be improved to promote the effective management of public resources. Weak spending or revenue decisions coupled with any deficiency of transparency and accountability, which may result from inadequate institutional arrangement, could lead to inefficient spending and unequal development across the country. To date, there has been little analysis of institutional arrangements in the FSM or how they have enabled SGs to effectively, efficiently, and accountably spend money on public services for development. To this end, this chapter first looks at the current trends in institutional revenue raising, service delivery responsibilities, and transfer mechanisms to help identify any horizontal or vertical imbalances. This is followed by an analysis of per capita spending across key sectors and performance across states to evaluate how efficient governments are in converting resources to outcomes. Finally, this chapter reviews PFM issues based on available information, which will help identify potential areas of weakness for transparency and accountability. This analysis to address these issues would be the next step, if there is demand from the authorities.

2.1 Institutional Arrangement

39. **The FSM is a voluntary federation of four semiautonomous states, each with its own executive and legislative bodies and considerable autonomy to manage its domestic affairs.** The FSM consists of 607 islands across four states—from west to east—Yap, Chuuk, Pohnpei, and Kosrae. Each of the four states has its own culture and traditions, but there are also common cultural and economic bonds such as the traditional clan systems. Traditional leaders exercise significant influence in society, especially at the village level. Although English is the official language, Chuukese, Kosraean, Pohnpeian, and Yapese are more commonly spoken in each state. The FSM constitution was ratified in 1978, with the voters of the then trust territories, Ponape, Kusaie, Truk, and Yap Districts, approving the constitution. The ratification of the constitution by these four districts recognized their sovereign right to form the FSM and make the FSM constitution the supreme law of the land. Each state, however, also retained its own constitution, elected legislature, and governor, as well as separate legislative and judicial systems.

40. The constitution specifies the three tiers of government and the responsibilities of the national, state, and local governments. Article V of the constitution states that it does not take away the role or function of a traditional leader as recognized by custom and tradition or prevent a traditional leader from being recognized, honored, and given formal or functional roles at any level of government as may be prescribed by this constitution or by statute. Article VII states that the three levels of government in the FSM are national, state, and local. A SG is not required to establish a new local government where none exists on the effective date of the constitution. Article VIII of the constitution

states that a power expressly delegated to the NG, or a power of such an indisputably national character as to be beyond the power of a SG to control, is a national power. A power not expressly delegated to the NG or prohibited to the states is also a state power.

41. Article IX of the constitution clearly specifies the legislative powers of the NG and the SGs. More specifically, the NG has the responsibility to (a) provide for national defense; (b) ratify treaties; (c) regulate immigration, emigration, naturalization, and citizenship; (d) impose taxes, duties, and tariffs based on imports; (e) impose taxes on income; (f) issue and regulate currency; (g) regulate banking, foreign and interstate commerce, insurance, the issuance and use of commercial paper and securities, bankruptcy and insolvency, and patents and copyrights; (h) regulate navigation and shipping except within lagoons, lakes, and rivers; (i) establish usury limits on major loans; (j) provide for a national postal system; (k) acquire and govern new territories; (l) govern the area set aside as the national capital; (m) regulate the ownership, exploration, and exploitation of natural resources within the marine space of the FSM, 12 miles beyond island baselines; (n) establish and regulate a national public service system; (o) impeach and remove the president, vice president, and justices of the supreme court; (p) define national crimes and prescribe penalties, having due regard for local custom and tradition; (q) override a presidential veto by not less than a three-fourth vote of all the state delegations, each delegation casting one vote; and (r) promote education and health by setting minimum standards, coordinating state activities relating to foreign assistance, providing training and assistance to the states, and providing support for postsecondary education programs and projects. On the other hand, the power to (a) appropriate public funds; (b) borrow money on the public credit; and (c) establish systems of social security and public welfare may be exercised concurrently by the National Congress and the states. A power not expressly delegated to the NG or prohibited to the states is a state power.

Sector	NG Responsibilities	SG Responsibilities
Health & Social Services		
Hospitals and clinics	 Policy coordination, M&E 	Policy setting, financing, ownership, management,
Procurement	 Oversight responsibilities 	 Policy setting, financing, management, M&E
Staffing decisions	 Oversight responsibilities, PSC 	 Policy setting, financing, management, M&E
Overseas referral scheme	 Policy coordination, administration 	 Policy setting, financing, management, M&E
Standards and licencing	 Policy setting, M&E 	 Implementation, management, M&E
Social Protection	 Pension management 	 Policy setting, financing, mangement, M&E
Education		
College of Micronesia	 Policy, financing, ownership, management, 	■ n.a.
Primary and secondary	 Policy coordination, M&E 	Policy setting, financing, ownership, management,
Standards	 Policy setting, M&E 	 Implementation, management, M&E
Staffing decisions	 Oversight responsibilities, PSC 	 Policy setting, financing, management, M&E
Scholarships	 Policy co-ordination, administration 	 Policy setting, financing, management, M&E
Economic development	 National economic development 	 State economic development
Transport, communication,	Coordinate state activities w foreign	 Policy setting, financing, ownership, management,
and infrastructure (TC&I)	assistance	M&E
Compact infrastructure	 Oversight and policy coordination, M&E 	 Policy setting, financing, ownership, management,
Finance and administration	 National finance and administration, PSC 	 State finance and administration
Justice and judiciary	 Supreme court, national issues 	 State courts and state issues
Political organs	 National, central organs 	 State, local organs
External affairs	 Policy setting, financing, management 	• n.a.

Table 5	5. Assignment	of Service	Deliverv	Responsibilities
I GOIC C		or ber thee	Denvery	responsionnes

Source: World Bank analysis based on consultation with the GoFSM.

Note: COM = College of Micronesia; M&E = Monitoring and evaluation.

42. Article XII sets out the fiscal roles of the executive, legislative, and judicial branches of the NG and provides the basis for the raising of resources and their expenditure. Subordinate to this, Title 55 of the FSM Code governs most PFM activities in the FSM, including budget procedures,

financial management, revenue raising, Compact procedures, contracting, auditing, TF management, public projects, and debt. This legislative framework sets out the basic budget and accountability structures, including (a) the requirement that all revenues and other resources raised or received by the government be paid into the general fund, out of which only legally approved expenditures can be made; (b) appropriate oversight by the FSM Congress; and (c) the delegation of responsibility and accountability for public resources to specified stakeholders. PFM is also largely delegated to the states. National responsibility for PFM is shared between the Divisions of Overseas Development Assistance and Compact Management and the DOFA. The fiscal year is from October 1 to September 30.

43. As detailed in the constitution, almost all administrative (service delivery) functions are the responsibility of the state and local authorities.²⁰ Most service delivery functions are assigned to the SG, including health and education, while the NG is mainly responsible for providing policy coordination, standard setting, and M&E functions. The current expenditure assignments are shown in Table 6. With regard to national defense, although this is an NG responsibility, the Compact includes provisions for national defense and is therefore not managed, in practice, by either the NG or the SG. With regard to infrastructure, priorities for investment are set by the SGs, and in the past decade the NG was responsible for coordinating financing, procurement, and construction. Once they are complete, the infrastructure assets are handed over to the SGs for management and maintenance. However, beginning in 2015, this model has been revised so that responsibilities for construction of the infrastructure assets will also be handed over to the SGs,

Revenue	NG	SG
 Compact grants Sector grant and supplemental education grant Infrastructure grants 	 0% + COM grants 0% 	 100% - COM grant 100%
Other grants	• Distributed depending on purpose but channeled through the NG	• Distributed depending on purpose, usually equally
National taxes (shared depending on point of collection) • Income tax • Gross revenue tax • Import duties • Fuel tax • Business license fees	 30% 30% 30% 20% 30% 	 70% (20% deposited into TF) 70% (20% deposited into TF) 70% (20% deposited into TF) 80% 70%
Local taxes • Sales and excise tax • Transaction tax (hotel, retail) • Fuel surcharge • Other fees, e.g. registration	• 0%	• 100%
Fishing revenues	• 100% – ad hoc sharing	• 0% + ad hoc sharing
Corporate taxes (captive) insurance)	• 100% – ad hoc sharing	• 0% + ad hoc sharing

Table 6. Revenue Sharing across Governments in the FSM in FY2015

Source: World Bank analysis based on consultation with the GoFSM.

Note: CIGs were managed by the NG up to the end of FY2014. Land taxes are difficult to implement in the FSM context given traditional clan ownership.

44. **There is a clear division in revenue raising authority between the NG and the SGs.** National taxes—including income tax, gross revenue tax, import duty, fuel tax, and business license fees—are set by the NG. These taxes are collected by the NG through representative offices in each of

²⁰ Although there are three tiers of government, this analysis focuses on the NG and SGs, given the data limitation on local governments. In this document, the SG is also referred to as local government or local authority.

the states, and these taxes collected are transferred directly to the national Treasury. A fixed proportion is repatriated to the SG at a later date (Table 6), depending on the location of tax collection. However, the SGs do not have access to the NG account system and are, therefore, unable to tell the accuracy of the regular tax transfers. National taxes constitute the bulk of tax revenues collected for the FSM. Local taxes—including sales tax, excise tax, transaction tax, and fuel surcharge—are set and collected by each of the SGs. These are collected by the state tax offices and are kept wholly by the SGs.

45. There is a relatively transparent transfer system between the NG and the SGs. Generalpurpose transfers (revenue sharing) are based on a fixed ratio as required by the FSM constitution and as further determined by law and provide general budget support to the states. As described in Table 6, revenue-sharing arrangements are based on a transparent fixed ratio. This ratio was increased in 2015 from a 50:50 share to a 70:30 share, with 70 percent of these revenues repatriated to the SG. The caveat to the increase in the SG share of revenues is that the additional 20 percent revenue shared needs to be saved in the state TFs to prevent pro-cyclical spending patterns.²¹ SGs have full authority in determining the usage of the other 50 percent. In addition, with rising fishing license fees, the NG has allocated, on an ad hoc basis, US\$10 million in FY2015–16 to the SGs for states to spend on infrastructure projects.

46. **States also receive significant transfers from the Compact based on a static allocation formula.** CSGs are routed through the NG; however, their functional use (for example, wages versus purchase of goods versus transfers) is at the discretion of the SGs, based on consultations with the USDOI and final allocation decisions of the JEMCO. The recurrent portion of CSGs, totaling 70 percent, are annually allocated for education (33 percent of Compact grants), health (21 percent), environment (3 percent), private sector development (5 percent), and capacity building (8 percent), although there are some annual variations in these sub-allocations. The remaining 30 percent of CSGs are earmarked for capital spending and are also known as the CIG.

47. In addition to the static sector allocation for CSGs as determined under the Compact, CSGs are shared across states based on a distribution formula. The distribution formula roughly shares one-third of CSGs equally across the four states, with the remainder shared based on the population of the states (there are also other adjustments based on negotiations). The latest Compact division formula details that Chuuk will receive 42.2 percent of the CSGs (excluding COM and supplemental education grants), with the remainder going to Pohnpei (28.1 percent), Yap (17.6 percent), and Kosrae (12.1 percent). This results in the smaller states receiving a relatively large share of the resources on a per capita basis. In the past, given the country's federation structure, the GoFSM has had limited practice in allocating public funds to address income inequality across the four states. Other sources of grant funds that are awarded for specific projects in specific states (for example, from China or other external partners) are supposed to be divided equally among the states and the NG in accordance with the constitutional provision contained in Article XII, Section 1(b).²²

 $^{^{21}}$ These is no policy to guide the future usage of these savings nor how these savings could complement the FSM TF in meeting the 2023 transition.

²² The provision says, "Foreign financial assistance received by the NG shall be deposited in a Foreign Assistance Fund. Except where a particular distribution is required by the terms or special nature of the assistance, each SG shall receive a share equal to the share of the NG and to the share of every other SG."

2.3 Current Trends

Box 3. Theory on Intergovernmental Relationships

A federal system is typically concerned with combining the political and economic advantages of unity while preserving the valued identity of subnational units or states. In this context, it is important in exploring and making continuous adjustments to the respective roles of different levels of the government and assigning responsibilities and fiscal instruments to the proper level of the government. Traditional theory on fiscal federalism contends that the NG should have the basic responsibility for macroeconomic stabilization and income redistribution in the form of assistance to the poor. The SGs should be responsible for the provision of goods and services whose consumption is limited primarily to their own jurisdictions and the allocation of resources to provide these services, to better meet state-level needs and preferences. The choice of a system of governance involves other values as well, including political objectives, and the system needs to be designed with the right incentive and accountability mechanism. While many studies on this topic tilt in favor of more localized service delivery, partly due to its ability to avoid inefficiencies of centralized decision making, recent literature suggests that more localized service delivery unless carried out under a strong center is also doomed to fail. The challenge in the new paradigm is to devise an appropriately structured system that mandates and provides incentives for responsible local government fiscal behavior and enables the creation of a climate conducive to development. More details can be found in annex 2.

48. **Given that the bulk of service delivery responsibilities lie with the SGs, not surprisingly, the SGs are responsible for over half of total government spending.** SG spending constitutes an important share of local economies, with SG spending averaging around 40 percent of state GDP over the past five years. The share of SG spending in total expenditures averaged 51 percent in the five years to 2014, falling from an average of 62 percent in the previous five-year period. The fall in the SG spending in total expenditure was largely explained by the pickup in implementation of CIGs, which up to FY2014 had been the responsibility of the NG. This trend is expected to reverse going forward, with the return of responsibility for building capital projects to the SGs in FY2015, although there has been no clear indication of an increase in SG capacity.²³ Recurrent spending by the SG on the other hand remained steady, averaging 68 percent of total expenditure in the past decade, partly a reflection of the fixed revenue allocation and grant transfer formulae.

49. **Data on sector composition of SG expenditure show some repetition and gaps in function areas that the constitution is silent on.** From a sector perspective, around 85 percent of all health and education expenditure and around 80 percent of all expenditure on finance and administration occur at the SGs. This is as expected given the highly localized nature of these service delivery functions. However, in these sectors, there are some areas of repetition; for example, each of the SGs and the NG have separate scholarship boards, medical referral boards, and procurement systems, all of which add to service delivery cost and reduce the efficiency of public spending. Spending on economic development has progressively shifted to the NG (from around one-fourth to half of total spending over the past five years), while the SGs' share of spending on environment and emergency management has increased over the past decade to around 60 percent of all spending in this category from a negligible base five years ago. Despite the constitution being silent on these two functions, spending trends would suggest these are in fact shared responsibilities.

 $^{^{23}}$ The number of people above the age of 25 years with an associate degree (AA/AS) or higher is used as a proxy for capacity. The 2000 census estimated that 11.7 percent of the relevant population group attained an AA/AS or higher, while the same ratio fell slightly to 11.6 percent, as estimated in the 2010 census.


0

2005 2006 2007 2008 2009



Figure 22. Revenue and Expenditure Devolution Compared to Global Peers

0

2010 2011 2012 2013 2014



40.0 Health, Education & social affairs 20.0 · Economic development TC&I Finance & administration 0.0 2007 2013 2005 2006 2008 2009 2010 2011 2012 2014

Sources: 2014 Economic Review, through TA from Graduate School USA, GFS database, World Bank staff calculations.

50. Distribution of revenues has moved in favor of the NG, given the recent rise in fishing license fees and corporate taxes derived from captive insurance. The share of SG revenues in total revenue averaged 46.3 percent in the five years to FY2014, falling from an average of 60.9 percent in the previous five years. The fall in the SGs' share of revenues is largely due to the rise in fishing license

fees²⁴ and increased corporate taxes collected through the captive insurance industry, both of which are currently NG revenues. The lack of reliance on the national taxes by the NG may result in a disincentive to raising or even reforming the portion of the tax regime within the purview of the NG. In fact, recent tax law changes to the national taxes have, in fact, reduced the tax base.

State proportion	2009	2010	2011	2012	2013	2014
Revenue	51.3	48.0	48.7	44.6	48.6	41.6
Tax revenue	61	60	56	55	51	34
Taxes on income	52	54	50	49	51	50
Taxes on G&S	73	74	73	72	72	73
Sales & Excise	100	100	100	100	100	100
GRT	50	54	50	50	49	48
Services & License fee	84	84	90	90	83	96
Taxes on trade	50	51	52	53	53	53
Taxes - other	47	3	1	1	1	0
Grants	57	50	53	49	61	75
Foreign grants	57	50	52	49	61	75
Current	82	79	84	80	84	84
Capital	2	2	2	2	0	0
Other grants	100	100	100	100	100	100
Other revenue	14	20	18	14	15	9
Interest	34	10	38	47	32	24
Rent	0	0	0	0	0	0
of which: fishing license fees	0	0	0	0	0	0
Other revenue	67	71	70	54	60	65
of which: administrative fees	54	57	52	36	45	48
Unidentified revenue	17	35	28	37	73	40

Table 7. State Government Share of Total Revenues

Source: World Bank staff estimates, IMF, 2014 Economic Review, through TA from Graduate School USA.

51. The NG has made efforts to increase the SG's share of revenues. In FY2014 and FY2015, the Congress approved measures to (a) increase the state's share of shared taxes from 50 percent to 70 percent (with the additional 20 percent required to be saved in the state's TFs); (b) reduce the NG's share of the Compact grant from 10 percent to 0 percent; and (c) appropriate US\$10 million of surpluses per year for infrastructure expenditure for states in FY2015 and FY2016. These ad hoc measures do not provide explicit policy objectives such as meeting existing gaps or improving access to services by the poor, and there are also some leakages into the recurrent budget. Therefore, it will be difficult to evaluate their efficacy in the long term.

52. **More fundamentally, the current revenue-sharing system does not correct for vertical imbalances.** While the flat sharing rate of NG revenues (that is, 70 percent to all states) is very simple, this does not take into account the differences in the fiscal capacity. For example, one SG may be able to raise more revenues from their own sources due to factors such as differences in population, wealth, and so on. Therefore, the system does not equally correct for different vertical imbalances across the states. Such a system should therefore be complemented by either more NG spending in the poorer states or higher general-purpose transfers to poorer SGs to help correct for horizontal imbalances.

²⁴ Fishing license fees are collected by NORMA (a public entity reporting to the Congress), with funds transmitted directly to the national Treasury.

Box 4. Instruments for Intergovernmental Finance

Types of imbalances. Horizontal fiscal imbalance is measured between the governments at the same level and emerges when SGs have different abilities to raise funds from their tax bases and provide services. This may arise from differences in the cost of service delivery, potentially due to geographic conditions or differences in local economic activities, wealth, or local resources endowments. Vertical imbalances arise when the revenue sources assigned to each level of government do not broadly correspond to their assigned expenditure responsibilities. One approach to measuring vertical imbalance is to identify the ability of different levels of governments to finance expenditures from their own sources of revenues. To meet these imbalances, transfers such as those described below can be employed.

General-purpose transfers. Such transfers are provided as general budget support, with no strings attached. These transfers are typically mandated by law. Such transfers simply augment the recipient's resources and are intended to preserve local autonomy and enhance inter-jurisdictional equity.

Targeted transfers. Such transfers are intended to provide incentives for governments to undertake expenditures in specific programs or activities. They are best suited for subsidizing activities considered high priority by a higher-level government but low priority by local governments. In their simplest form, they are grants for general areas of state expenditures (such as education) with no strings attached, allowing recipients' discretion in allocating the funds among specific uses within the sector (block grants). Targeted transfers can also specify the type of expenditures that can be financed by presetting shares to expenditure categories such as salaries, capital expenditures, or operating expenditures (input-based targeted transfers). Alternatively, targeted transfers may be output based by requiring the attainment of certain results in service delivery (output-based targeted transfers). Targeted transfers may also incorporate matching provisions, requiring grant recipients to finance a specified percentage of expenditures using their own resources. Matching requirements encourage greater scrutiny and local ownership of grant-financed expenditures. However, they represent a greater burden for a recipient jurisdiction with limited fiscal capacity. More details can be found in annex 3.

Capitation grants. These grants are resources allocated directly to service delivery units, typically based on a per capita financing formula. For schools, the formula is typically based on the number of pupils enrolled and is hence directly linked to school enrolments in such a way that enrolment of each additional student results in increased funding to the school. For health centers, the size of the grant is typically linked to the size of the local population and local demand for health services. The formulae adopted by different countries vary widely, but in general, they share the objectives of pursuing equity, efficiency, and transparency in resource allocation.

Source: World Bank. 2006. "A Practitioner's Guide to Intergovernmental Fiscal Transfers." Working Paper WPS4039, World Bank, Washington, DC.

53. With local revenues funding a relatively small portion of spending, the SGs rely heavily on external grants to fund their operations. At the states, local revenue as a share of state GDP remained low, ranging from 2.9 percent in Pohnpei to 8.3 percent in Yap. As a result, local revenue raised by the SGs has, on average, funded a mere 12 percent of SG expenditure in the past decade. National taxes collected by the NG and shared with the SGs, on average, funded an additional 13 percent of SG expenditure in the past decade. While revenue sharing is a common and simple way of sharing resources with the SG and may be appropriate in light of capacity limitations, it provides poor incentives for the local governments to boost collections and improve local economic growth. The remaining three-quarters of SG expenditure is funded through the Compact and other grants according to the distribution formula. There are currently no equalization or matching grants to channel funds from relatively wealthy jurisdictions to poorer ones to ensure or incentivize a consistent level of service delivery.



Figure 24. Sources of Funding for SG expenditure

Source: World Bank estimate based on the audited GoFSM accounts.

54. **Hard budget constraints have generally held across states.** The SGs rely heavily on external grants and have the authority to issue debt. However, in practice, conditions for hard budget constraints have generally held. This is explained by the SGs having limited access to debt capital markets and contraction of even concessional debt through the NG, achievement of near balanced budgets at the SG, and general restraint by the NG from bailing out SGs.

2.4 Performance across Sectors and Governments

55. The NG has played a restricted role in ensuring macroeconomic stability, suggesting room for the NG to enhance its role in policy coordination to ensure macroeconomic stability. One of the key functions of the NG in a federal structure is to ensure macroeconomic stability. Economic growth and inflation at the states have been volatile and varied, which may be partly attributable to its size, remoteness, and other structural issues. Pohnpei is the only state with average positive growth in the past decade while the other states have all faced sustained economic contractions. Real economic growth has also been volatile and contingent on external factors. Given the rigidity of the fiscal framework, the nationally coordinated fiscal policy is only partially able to mitigate the effects of external shocks such as the global financial crisis and the global food and fuel crises. Although there are no independent monetary and exchange rate policies, the use of the U.S. dollar may have also contributed to stability. Coordination of the economic policy by the NG has also been limited and partly hampered by the lack of timely data. The FSM is also classified as being at high risk of debt distress according to the IMF, partly due to concerns on the potential inability of CTF income to replace CSGs. However, the NG has enhanced efforts to increase savings to mitigate future shocks.



Figure 25. SG Spending and Index of Population, Poverty, and Dispersion

Source: World Bank estimates based on data provided through the census, the HIES, and the GoFSM. *Note:* CHK = Chuuk; PNI = Pohnpei; KOS = Kosrae.

56. Poverty outcomes have remained weak, suggesting unmet horizontal imbalances, but the NG's efforts to address this may be constrained by the reliance on CSGs. Analysis of poverty trends suggests that both poverty and inequality increased between 2005 and 2013. Poverty remains more prevalent, severe, and deeper in Chuuk and Pohnpei than Yap and Kosrae. The proportion of the population living below the food poverty line in Chuuk and Pohnpei accounts for 94 percent of the total extreme poor, and Chuuk alone constitutes 72 percent of the extreme poor of the nation. Poverty has a high correspondence to the level of education, and it is more significant according to the household head's education. Working in the public sector is a definite advantage to moving away from poverty, but it requires a high level of education for entry. The continued concentration of poverty in Chuuk, for example, raises the question of whether resources have been appropriately allocated to adjust for the differential needs across the country. Public spending as a share of state GDP ranged from 20 to 60 percent of GDP in FY2014. There may exist a relationship between the size of SG spending to GDP and population, poverty rate, and geographic dispersion.²⁵ However, this relationship does not hold as strongly for the states of Chuuk and Kosrae. Efforts to address horizontal imbalances may be constrained by heavy reliance on CSGs.



Figure 28. Health and Education Expenditure Per Figure 29. Finance and Administration Expenditure Capita



Figure 27. Recurrent Expenditure Per Capita



Per Capita



Source: World Bank estimate based on data provided through the census, 2014 Economic Update, the GoFSM. *Note:* CHK = Chuuk; PNI = Pohnpei; KOS = Kosrae.

57. Given the tightening fiscal conditions for SGs, which may already be affecting service delivery, it is important to look at sector outcomes and expenditure performance across states. Real expenditure per capita has fallen across the states, some by as much as 30 percent, partly explained by the contraction of CSGs in real terms and despite a falling population level. Chuuk, the largest and most scattered state with around half of the FSM's total population, had the lowest expenditure per

²⁵ This would be expected because (a) in wealthier states, non-state activities are expected to be higher; (b) in larger states, more economies of scale is expected in service delivery; and (c) in more geographically dispersed states, the cost of public service provision is expected to be higher. However, with limitations on the number of observations, this relationship is difficult to prove in a statistically significant manner.

capita followed by Pohnpei, the second largest state, and then the smaller states of Kosrae and Yap. Movements in real per capita expenditure in health and education varied across the states, with Chuuk experiencing a 30 percent increase compared to a 27 percent decline experienced by Pohnpei. This highlights the difference in needs and issues across the states. With the implementation of the LTFF beginning in 2014, expenditure per capita for SGs is expected to fall further in the coming years.²⁶ In this context, understanding how much different states are spending to deliver the same services could help identify areas of potential efficiency gains. Performance indices reflecting the outputs and outcomes achieved in key sectors have been computed to analyze differences in spending efficiencies across the states; however, these will need to be interpreted in the context of local geography and so on. However, this analysis is constrained by data issues as noted through the report.

58. Based on available student completion data and expenditure data, an index of relative cost to graduate a student in grade 12 is computed and highlights different needs and efficiency issues across states. Based on this index, Kosrae is the most efficient state, with the highest ranking on the index, while Chuuk is the least efficient state. Compared to Kosrae, in Chuuk it costs around 190 percent more to graduate a student, followed closely by Yap (170 percent more) and Pohnpei (50 percent more). Some of these disparities may be associated with differences in population density and geographic disparity. However, one significant disparity in outcomes for Chuuk is the 8th and 12th grade completion rates, which are at around 30 percent of the total enrolled students. This may be explained by the relatively low expenditure per student. On the one hand, this may suggest a need to refocus expenditure toward education in Chuuk, in particular to improve the completion rate, which would minimize nonproductive investment in education. On the other hand, the low completion rates in Chuuk may have less to do with public spending than with household-level, demand-side constraints to accessing schools (see chapter 4). In Yap, cohort completion rates are at around 40–45 percent. However, expenditure per student is the highest among the states. This may be explained by the fact that there are 59 schools for a state of 11,000 people (compared to 8 in Kosrae for a population of around 7,000) and around 300 staff for a student population of around 2,700. Across all governments, limited sector performance data are collected and/or published.

	PNI	СНК	KOS	YAP
12th grade cohort completion rate	43%	27%	75%	40%
Expenditure per graduating student (12th)	20,902	26,098	24,967	36,306
Relative efficiency	1.20	0.61	1.75	0.65

Table 8. Select Education	Sector Performance	Indicator
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Source: World Bank estimate based on data provided through the census, Compact Reports, the GoFSM. *Note:* CHK = Chuuk; PNI = Pohnpei; KOS = Kosrae.

59. Similarly, based on available data on the public sector across the states, two performance indices were computed to provide comparison on the relative size and efficiency of the public sector in collecting revenues. The first indicator looks at the size of the public sector using the number of public sector employees (including public enterprises) adjusted for the relative wage differential between the public sector and the private sector. The indicator suggests that Chuuk had the least 'bloated' public sector while Kosrae had the most 'bloated' public sector was 1.5 times while all the other states had pay differentials exceeding 2.0 times, suggesting some room for better alignment. In addition, NG employees deployed at the states earned on average 3.5 times to 4.5 times more than those employeed in the private sector, also suggesting room for better alignment (Figure 17). The second index looks at

²⁶ The LTFF sets out the objective to reduce expenditure in real terms by 6 percent every 3 years until 2023, in the absence of effective increases in revenue effort, to reduce dependency on grant financing and further streamline service delivery by SGs. The LTFF does not extend to the NG.

the relative efficiency in the public sector in collecting local taxes. Yap spends the least on finance and administration to collect every dollar of local taxes. In comparison, it costs between 100 percent and 200 percent more in the other states to collect every tax dollar, with Kosrae being the most inefficient. This would suggest the potential for some efficiency gains in finance and administration in Kosrae. Furthermore, a review of the existing tax policy or reorientation of finance and administration resources toward tax collection may be warranted across the states to improve tax effort.

60. **Current resource allocation norms may be a contributing factor to the varied performance across sectors and states.** In the past, resource allocation across states and sectors have tended to be relatively static. While there are no obvious distortions from these allocation decisions, as demonstrated above and also in the following chapters, the needs and issues of the states differ. Therefore, the current resource allocation model may inadvertently be resulting in a supply-driven service delivery model, leading to efficiencies in the system. In addition, while an accountability framework exists, implementation issues remain a challenge. For example, there are sector-specific outputs such as improved graduation rates associated with CSGs; however, not achieving these targets does not tend to have serious implications on future transfers. Furthermore, several reports from the U.S. Governance and Accountability Office (GAO) have noted the continued lack of reporting on sector indicators or outcomes.²⁷ Introducing an incentive mechanism may be one avenue to support improved accountability, development performance, and efficiency.

2.5 Public Financial Management

61. The passage of numerous supplementary budgets during the year and frequent reallocations among administrative heads suggest weak budget credibility. The NG and SGs all operate within balanced budget requirements based on either constitutional or statutory provisions.

However, the definition of a balanced budget is not restricted to the operations of a single budget year. Funds unexpended in one year are reported as revenues in the following year. In line with U.S. Generally Accepted Accounting Principles standards, outstanding commitments at the end of the year are not accounted for as expenditures. In addition, there is limited guidance on the management of surpluses. Arrears data are generally not available, although anecdotal evidence suggests they are significant. Supplementary budgets are numerous and the budget outturn varies significantly from the original budget across the states. Variance in expenditure composition

Figure 30. Five-year Divergence between Actual and Budget Outturns



is also high with frequent reallocation of expenditure among administrative heads.

62. The 2014 PEFA report for the NG found that budget credibility is undermined by fragmentation in the planning process and gaps in what is covered as part of the planning and budgeting process. Despite the preparation of several planning documents in recent years, there are weak links between these plans and budgets. The long-term development plan, contained in SDP 2004–2023, has sectoral and/or departmental mission statements, strategic goals, outcomes, activities, and outputs. Medium-term strategic plans, including those recently developed by the states, have not been

²⁷ Although this may be a reflection of a variety of factors, including the thin and limited capacity in SGs and the lack of clarity around the M&E responsibilities.

fully costed. Other planning documents exist, such as the long-term fiscal planning document. However, in practice, there are no sector or line department medium-term strategy documents that reflect complete costings for recurrent and investment expenditures. The fragmentation of planning, implementation, and M&E responsibilities across departments and between the NG and SGs also hampers their effectiveness. There also exists a weak linkage between investment budgets and forward expenditure estimates, including maintenance. Although medium-term estimates are required to be presented in the budget documents for two forward fiscal years, the figures are typically the same as those for the coming fiscal year (proposed budget). There also appears to be a relatively limited role for the political level at both the executive and legislature levels in medium-term and policy-based budgeting. A weak linkage between development plans and budgets could lead to inefficient resource allocation to achieve the desired outcomes.

63. The FSM, given its federation structure and the receipt of funds under the Compact, has a complex budget process, and its compressed nature may hamper budget credibility. For SGs to receive CSGs, budget processes begin in April with submissions of authorized state budgets to the NG by May 15. This is then submitted to the U.S. Office of Insular Affairs (OIA). Upon completion of joint consultation, the budgets are revised, compiled, and resubmitted to the JEMCO for final approval in August. Back in the FSM, there are appropriations by the Congress and each of the state legislatures before October 1. In practice, the budget preparation process for the next fiscal year begins early, soon after the beginning of the current fiscal year. In the past, line departments have been frequently late in submitting their detailed budget requests, in part because the calendar gives them only a limited time from receipt of the full Budget Call to put together a large amount of information and complete their submissions (sometimes as little as four weeks during the Christmas and New Year period),²⁸ resulting in delays in the approval and implementation of the budget. On a separate note, given that the preparation process begins early and there is weak in-year reporting, the governments often do not have a good sense of fiscal developments in the current year. As a result, past budgets have been based solely on the previous year's budget figures. In consultation with USDOI, decompressing the front end of the budget calendar may support improved budget credibility.

Preparation Step	Timing
DOFA circulates outline of the Budget Call to line departments, offices, and agency heads.	November
DOFA circulates detailed Budget Call (including forms, timetable, and annexes) to line	December
departments, offices, and agency heads.	
DOFA holds technical meetings with budget officers from line departments, offices, and	December
agencies.	
DOFA circulates second Budget Call, relating to Compact funding, to line departments,	December/
offices, and agency heads, and state governors.	January
Deadline for submission to president of estimates (budget proposals) by line departments,	January 15
offices, and agencies	
Joint meetings between the line departments offices and agencies to discuss their budget	Second half of
Joint meetings between the fine departments, offices, and agenetes to discuss their budget	Second han of
proposals	January
proposals Executive Budget Review Committee (EBRC) meetings with line departments, offices, and	January February to
proposals Executive Budget Review Committee (EBRC) meetings with line departments, offices, and agencies to discuss their budget proposals	January February to mid-March
proposals Executive Budget Review Committee (EBRC) meetings with line departments, offices, and agencies to discuss their budget proposals EBRC submits its recommended budget to the president.	January February to mid-March March 15
proposals Executive Budget Review Committee (EBRC) meetings with line departments, offices, and agencies to discuss their budget proposals EBRC submits its recommended budget to the president. DOFA completes its preparation of the executive's budget document.	January February to mid-March March 15 March 25
proposals Executive Budget Review Committee (EBRC) meetings with line departments, offices, and agencies to discuss their budget proposals EBRC submits its recommended budget to the president. DOFA completes its preparation of the executive's budget document. President submits NG budget to FSM Congress.	January February to mid-March March 15 March 25 April 1
proposals Executive Budget Review Committee (EBRC) meetings with line departments, offices, and agencies to discuss their budget proposals EBRC submits its recommended budget to the president. DOFA completes its preparation of the executive's budget document. President submits NG budget to FSM Congress. SGs submit comprehensive Compact budget (containing all four states' budgets) to the	January February to mid-March March 15 March 25 April 1 May 15
From the endpartments, offices, and agencies to discuss their budget proposals Executive Budget Review Committee (EBRC) meetings with line departments, offices, and agencies to discuss their budget proposals EBRC submits its recommended budget to the president. DOFA completes its preparation of the executive's budget document. President submits NG budget to FSM Congress. SGs submit comprehensive Compact budget (containing all four states' budgets) to the president.	January February to mid-March March 15 March 25 April 1 May 15

Table 9. Budget Preparation Calendar	Table 9	. Budget	Preparation	Calendar
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²⁸ While there is no international best practice on the time needed to consider annual budgets, good practice is to allow around two to three months for legislative authorities to scrutinize draft budgets.

Preparation Step	Timing
Internal FSM consultation on proposed budgets	Late May–June
Consultation on Compact budgets with the USDOI-OIA	By June 15
Final submission of Compact comprehensive budget to the JEMCO	July 1
FSM-U.S. JEMCO meeting for final Compact budget allocations	August
FSM Congress approves NG budget; state legislatures approve the SG budgets.	September
DOFA advises line departments, offices, and agency heads of their allotments for the year.	End-September
Start of fiscal year	October 1

Note: 1. Based on FY2012 planned Budget Calendar. 2. Steps and timings in bold refer to statutory requirements as set out in the Financial Management Act. 3. Steps and timings in italics refer to requirements in the agreement with the United States under the Compact.

64. Limitations of the FMIS may in turn be restricting the governments' ability to improve aggregate oversight of fiscal risks, monitoring of budget performance, and accountability. The same FMIS is used across the NG and SGs. However, the chart of accounts is not fully uniform or mapped to the GFS and as such the data in the FMIS cannot be aggregated automatically to produce summary data such as total wages spent or total taxes collected by the SGs. It will allow for sharing of revenue collection data between the NG and SGs on time. Improving the FMIS29 will also enable easy production of regular in-year reports, tracking and adjusting expenditure as needed. This could also be the starting point to addressing other reasons for inefficient expenditure management, including incomplete reconciliation practices; weaknesses in internal controls; the unavailability of key fiscal information to both parliament and the public; and weaknesses in linking policies, plans, and budgets and in turn improving transparency and accountability. The GoFSM is working with the Bank to introduce a new FMIS across the SG and NG. The project is under preparation and the design will draw on the challenges identified in this analysis and discussions with the SGs and NG.

65. The budget along with other fiscal information is not generally shared with the public and its current contents will be difficult for the public to consume. The budget book, despite it being several hundred pages long, does not provide information on the macroeconomic context, the debt stock, financial assets, summarized information on revenues and expenditures according to the main heads of classification (apart from the individual line department summaries), or analysis of the fiscal implications of new policies. As such it would be a difficult document for the public to consume (even if it was made public), limiting transparency and participation. Publication and dissemination of summary information of the budget and other fiscal data could improve transparency, accountability, and public participation to enhance service delivery. To this end, the GoFSM has begun to publish an annual economic fiscal and economic update through the DoFA website.

66. **Transparency is also made more difficult by limited channels to access information, for example, on websites and the lack of a systematic means of disseminating information.** In the FSM, in practice, it is very difficult to get hold of the final GoFSM budget book (containing the final, approved figures, including supplemental requests) in a print or electronic form. It is not posted on existing websites, and printed copies are not generally made. The original Appropriation Act is posted on the Congress website but, in the absence of an index, the act is difficult to find as it involves searching individually through each of the congressional sessions and, within these sessions, each file. At the same time, there are numerous supplementary budgets, access to which involves the same process of searching. Up-to-date reports prepared by the FSM Office of Public Audit are available on the office's website, which is easy to navigate. Otherwise, reports from some congressional hearings are available

²⁹ An IMF TA has supported the NG in mapping its chart of accounts with the GFS and the rollout of this mapping exercise should not require significant additional work. A further TA with the information technology service provider to code the mapped GFS codes into the FMIS will then be needed.

on the Congress website, but accessing the reports requires searching through each congressional session, which can be time-consuming.

67. Findings from audit reports, which are published regularly, are not systematically followed up on. Each year, the Congress appropriates a significant amount of monies from the general fund to fund public projects and social programs in the four states. Funding for public projects increased from US\$4.2 million in FY2001 to US\$6.3 million in FY2013 and is estimated to have increased further to US\$10 million in FY2014 (over 3 percent of GDP). The 2014 Performance Audit on these funds found that the process for appropriation, allotment, and spending of these public funds was not sufficient to establish transparency and accountability. Also, certain projects were disbursed without following the intent of the appropriations or projects and issues, with noncompliance of applicable laws and regulations. While the government formally responded to the report, no further follow-up actions were made. Given the tight fiscal conditions and the need for growth impetus, ensuring transparency and accountability of spending will ensure the best development outcomes for the population.

68. **Budget transparency is a necessary but not sufficient condition to ensuring greater** accountability of authorities. While the legislative framework sets out the basic budget and accountability structures, the ability of stakeholders to hold the government to account for the achievement of policy priorities can be constrained by the limited involvement of the cabinet in reviewing and approving budgetary parameters and by the legislature's relatively limited focus during budget discussions on how closely proposed budgetary allocations relate to government policies. Translating budget transparency into accountability requires participating in the budget process. This includes participating in highlighting the budget priorities to ensure that the budget reflects not only local needs and preferences but also participation in M&E. Several studies have in fact shown that disclosure of financing information in itself will not necessarily lead to more accountability if there are impediments to citizen participation in the budget (Fukuda-Parr et al. 2011; Khagram et al. 2013). Participatory budgeting, as a social accountability mechanism, could be an entry point for a potentially broader governance reform in the country.

2.6 Conclusion

69. The analysis found that moving toward a needs-based approach to resource allocation with sound institutions and appropriate incentive mechanisms could support spending efficiency and development outcomes. Despite the high level of localized service delivery in the FSM, outcomes remain weak and varied, suggesting areas of potential disconnect in the current institutional setup. In particular, the current static transfer system, while transparent, may be reviewed and strengthened to better equalize for different development needs and cost of service delivery across the states. This could be complemented by appropriately designed incentive mechanisms to improve development outcomes. A more fundamental step, to enable these initiatives, is to strengthen transparency and accountability, starting with the FMIS and budget publication. Strengthening intergovernmental relationships and public expenditure management are important steps for the GoFSM in building the experience and credibility, which in the long term could support its move toward fiscal independence. Core actions and next steps are laid out below and more details are provided in the conclusion.

	Desired Impact	Short-term Actions	Medium- to Long-	Lead Agency(s)
			term Actions	
Improve	Better inform policy	Strengthen the central sta	atistical agency, with the	Statistics,
institutional	makers and create	NG providing technical s	DOFA, health,	
arrangement	more awareness and	data collection across all	education,	
	scrutiny among	Publish, disseminate	Publish, promote state	PMO, IT
	citizens to improve	summarized budget on	performance	
	spending efficiency.	_	indicators, including	

	Desired Impact	Short-term Actions	Medium- to Long-	Lead Agency(s)
			term Actions	
		accessible public	social sector	
		platforms.	outcomes.	
	States are able to	Further unify the chart	Improve budget	DOFA,
	regularly track	of accounts, map the	credibility by using	Treasury,
	revenue (including	chart of accounts to the	updated fiscal	FUNDWARE,
	those collected on	GFS, and link	information and	TA, or external
	their behalf) and	FUNDWARE across	decompressing the	consultant
	spending, leading to	the states.	front end of budget.	
	better budgeting.			
Improve	Move toward a needs-	Review division of	Undertake a review of	Senate, state
allocative	based approach to	responsibilities (clarify	the transfer formulae	governors,
efficiency	resource allocation	areas of overlap and	-revenue sharing,	USDOI
	across all sectors.	gaps) through the	state distribution,	
		relevant bodies.	CSG, and incentive	
	States are rewarded	Evaluate options for	mechanisms, including	Senate, state
	for performance to	incentivizing improved	options for output-	governors,
	incentivize outcomes.	state-level outcomes.	based targeted	USDOI, DOFA
			transfers.	

Note: PMO = Project Management Office.

In the short term, clarifying further the division of responsibilities and improved 70. harmonization and collaboration across the governments could support efficiency gains. While division of responsibilities is generally clear, some overlaps and gaps remain, which should be clarified through the relevant legislative and policy bodies. These bodies should seek to clarify the responsibilities of functions that are currently shared in practice, but not specified in the constitution, such as economic development and environment and emergency management. These bodies could also debate the merit of streamlining functions that are replicated across the states. Moreover, across the various sectors, the FSM will benefit from greater collaboration and coordination between the national and state departments, with a greater role afforded to the national departments for capacity building, technical support (including in the area of statistics collection and M&E), and assistance to state departments, creation and implementation of minimum standards in service provision, and a formal drafting of national and state-specific sector objectives, with a clear link between inputs, outputs, and outcomes. Such collaboration will pay due respect to the autonomy conferred upon the states under the FSM's constitution. Without such coordination, it is difficult to plan at the aggregate level to ensure that resources are targeted to where they are needed most.

71. **To meet the emerging fiscal gap, the NG should work with the SGs to improve tax effort.** Incentivizing improved tax effort by the SGs will reduce the SGs' dependence on CSGs and fiscal gap in the long term. This could be done in numerous ways but requires further detailed analysis, which is beyond the scope of this study. Other countries have implemented matching grants, for example, to incentivize improvements in tax effort by the local governments.

Box 5. Taxation and Decentralization

Many countries attempt to achieve objectives such as reducing the fiscal gap or inequality through systems variously described as 'tax sharing' or 'revenue sharing'. While there are a wide variety of such systems, most of them suffer from several common problems. First, if they do not apply to all national taxes but only to a subset of such taxes, they may bias the national tax policy. Second, if—as is often the case—they share the revenues from origin-based (production) taxes to the jurisdictions from which the revenues are collected, they break the desirable link between benefits and costs at the local level and hence reduce accountability and the efficiency of tax decentralization. Third, since tax rates in such systems are invariably set by the central government and since the sharing rate is often applied uniformly throughout the country, once again the accountability link is broken and the local authorities have no incentive to ensure that the amount and pattern of their spending are efficient. In the case of Argentina's system of revenue sharing, structural reforms became

contingent to additional revenue-sharing arrangements and the revenue-sharing arrangement itself became the subject of political dispute.

To develop adequate revenue sources for service provision, in addition to strengthening tax administration, practical options to stimulate tax efforts include (a) allocating a fraction of the grants according to the rate of growth of own revenues; hence, remunerating those SGs that exert a larger tax effort than the average (to reduce large fluctuations from one year to another, a moving average of the growth rate of own revenues from the past 3–5 years could be applied; (b) implementing a 'matching principle', where revenues collected by the SGs are matched by the NG through a co-financing grant, with those smaller or more disperse or poorer SGs receiving a higher matching rate, which is periodically reviewed; and (c) introducing complementing capacity grants to support states with weaker capacity.

Source: Alfredo Cuevas, IMF Working Paper WP/03/90.

72. More importantly, the GoFSM could consider a review of the current transfer system rather than continue with ad hoc revenue-sharing measures. The current transfer system (both revenue-sharing and distribution formulae) may not be correcting for different imbalances equally, and the efficacy of the ad hoc revenue-sharing measures is unclear. Therefore, a review of the current transfer system may be warranted, to evaluate options to equalize resource allocation based on different development needs and cost of service delivery across the states. In other countries, the transfer formula is often designed to take into account population (size of service delivery needs), the proportion of the population in poverty (which will need additional resources), GDP per capita, (wealthier states should be able to raise more own resources), dispersion (which will cost more to deliver services), and tax effort (to remove distortionary incentives). The transfer formula is then typically embedded in a medium-term fiscal framework and adjusted periodically based on performance.

73. **To better meet horizontal imbalances and improve development outcomes, the GoFSM in consultation with the USDOI may consider a review of the allocation of CSG across sectors.** While there are no obvious distortions with the sector allocation of the Compact grant allocation formula, regular review of the Compact sector allocations may be warranted to adjust for differential sectoral needs across the different states and improve outcomes. To further incentivize outcomes, a separate portion of CSGs may be held back and distributed only when key performance indicators are met (output-based targeted transfers). This not only provides an incentive for governments to improve their performance and monitoring but also provides an indicator visible to the wider public for scrutiny. In parallel, greater TA may be needed to help support capacity building in the long term.

74. **Improving transparency could be a first step toward strengthened local accountability.** Very little information is currently shared in a systematic way with the public, including information on public finances, making it difficult for citizens to participate in the decision-making process. Information that is being shared, such as the budget, is also difficult for citizens to absorb. To overcome these issues, many other countries publish summarized budget information and disseminate this information on platforms that are easily accessible by the public. In addition, the publication and promotion of key state performance indicators in other countries formed the basis of additional resource allocation and created more awareness and scrutiny among citizens and competition among the SGs, which led to improved service delivery and outcome.

75. **Strengthening the FMIS is also important to ensure implementation of the budget and the achievement of the stated development objectives.** Strengthening the FMIS, including to further unify the chart of accounts across the states, mapping the chart of accounts to the GFS, and linking the systems, will enable easy production of regular in-year reports, tracking and adjusting expenditure as needed and revenue information for planning. This could also be the starting point to address other reasons for inefficient expenditure management, including weaknesses in internal controls, cash flow

planning, and commitment controls, which potentially disrupt smooth budget execution by line departments.

III. Public Investment Management

3.1 Introduction

76. Infrastructure investment is a key pillar underpinning the GoFSM's strategy for development; however, its utilization has been weak in the past and the resource envelope is uncertain going forward. The SDP 2004–2023 aims to achieve self-reliance and sustainability with open, outward-oriented, and private sector-led development. To this end, infrastructure investment is expected to play a significant role in achieving the objectives of the SDP. Currently, a very large portion of all public investments are funded by grants, mostly Compact and U.S. federal grants. However, implementation of these projects is often slow and full utilization of these funds has not yet been achieved, resulting in over US\$120 million of unused funds remaining in the U.S. Treasury awaiting implementation. Going forward, the arrangements of the amended Compact may have serious implications for capital spending after 2024. More specifically, since public investment is a discretionary form of spending, it is more sensitive to cuts than recurrent expenditure when the government is confronted with a fiscal gap.

77. This chapter aims to investigate the effectiveness of resource allocation, identify bottlenecks to infrastructure investment, and consider how current policies can be improved to meet the 2023 transition. To analyze allocative and technical efficiency of public investment in the FSM, this chapter (a) documents the current institutional setup and capital projects put in place since the amended Compact came into effect; (b) analyzes and benchmarks overall trend, sector and state composition, source of funding and implementation rate, and growth impact and compares the composition of actual infrastructure investment with the strategic priorities as outlined in the IDP and SDP; and (c) documents challenges to public investment management using the Bank's 'Diagnostic Framework for Assessing Public Investment Management' and taking into account the newly released IDP 2016–2025. This chapter concludes by providing some recommendations on how current policies can be strengthened to improve the return on infrastructure investment and ensure adequate policy and resources in the post-2023 period. Core actions and next steps are laid out below and more details are provided in the conclusion.

78. The quantitative analysis of actual performance relies largely on the SBOC project data set and is notably constrained by data limitations. While data about planned commitments for individual projects are available, there is little information about the progress of actual disbursements, intended development outcomes of projects, or whether the completed projects achieve these outcomes. There are limited data on outputs of infrastructure investment (such as quality and coverage) for examining the efficiency of the investment process by linking outputs to inputs. The lack of baseline and regularly collected data, on performance, for example, also prevents a robust analysis of impacts of infrastructure projects. No database exists for the monitoring of public projects.

3.2 Expenditure Trends

79. **Public Infrastructure Management (PIM) in the FSM was highly centralized until the end of FY2013, with the Project Management Unit (PMU) managing the bulk of infrastructure investment implementation.** About 90 percent of public capital expenditure was managed by the NG during FY2009–13, and the share had been relatively stable. On average, each state managed less than US\$2.5 million a year, and Kosrae even managed just 0.5 million. The situation has changed considerably since FY2014 when the amount of capital spending managed by the SGs increased 2.5 times and about one-third of total capital spending was managed by SGs.

80. **Capital spending managed by the states largely comprises public projects that do not use Compact funds and are subject to Congress appropriation.** Despite its small scale, the overall spending for public projects has increasingly become a major spending item of the budget. Expenditure by the National Congress on Public Projects rose from US\$6.8 million in FY2013 to US\$10 million in FY2014 as a result of a second appropriation during 2014. Consequently, spending for public projects exceeded one-quarter of public capital expenditure or accounted for 5.4 percent of total expenditure in FY2014. More than half of this money was spent on economic and infrastructure projects in the states while a further 25 percent went to assist with funding of municipalities in the states. SG capital spending experienced a further boost in 2014 from the allocation of US\$10 million of fishing license fee for infrastructure development.

81. Detailed project data provided by the SBOC as of June 2014 show that US\$116 million of infrastructure projects were implemented between FY2004 and FY2013, out of US\$180 million committed for this period. There was, however, a de-obligation of almost US\$29 million, leaving actual commitments of just US\$151 million in the first decade of the amended Compact. The total amount that the FSM can receive as agreed in the amended Compact was US\$250 million for FY2004-14. However, only 58 percent of the available Compact resources were committed and the cumulative grant arrears amounted to more than US\$100 million at the end of FY2014. Almost four-fifths of these actually committed resources were provided by the amended Compact (and the rest came from other sources such as U.S. Federal Programs, the ADB, and other matching funds). The FSM capital spending declined significantly in FY2013–14 after a rapid growth period during FY2009–12. Capital spending contracted by 37 percent in FY2013 and a further 9.6 percent decline was recorded in FY2014. As a result, the share of capital spending in total government expenditure plummeted from about 30 percent in FY2009–12 to just 20 percent in FY2014. The decline was largely caused by the suspension of new infrastructure grants that began in FY2013. The release of new funds was conditioned on the revision of IDP 2004-2023, which was completed in October 2015. In addition, the FAA-funded projects for airport improvements drew to a close in FY2013, and this contributed considerably to the 25.9 percent decline in construction activities in this fiscal year.

82. Another salient feature of public investment in the FSM is the large degree of fluctuation. Year-on-year growth rate of capital spending over FY2004–14 varied from -37 percent in FY2013 to 87 percent in FY2009 to 115 percent in FY2007. Part of the fluctuation can be explained by the small size of capital spending, so the initiation or conclusion of a project can induce a significant proportional change. Yet with the well-known availability of resources and of the list of approved projects over a long period, large fluctuations also reveal information about the inadequate quality of planning and implementation capacity. Stop-go investment policies can lead to negative consequences for the cost, timeliness, and quality of the resulting infrastructure asset. International experience suggests that the volatility of investment flows, even when corrected for income levels, is associated with the strength of PIM institutions (IMF Staff Report, June 2015).

83. **Figure 31 shows a strong short-term correlation between public capital spending and the performance of the construction sector.** This is particularly true for the post-2008 period during which the growth rates of public capital spending and the GDP of the construction sector do not differ much from each other. While public capital spending appears to have an instantaneous effect on the construction sector, the relationship between public capital spending and GDP growth is much less obvious. Possible causes for any disconnect between public capital spending and growth, as outlined by some reviews,³⁰ include composition, sequencing, and efficiency of investment. This includes

³⁰ For example, Jean-Jacques Dethier, and Alexander Moore. 2012. "Infrastructure in Developing Countries: An Overview of Some Economic Issues." ZEF-Discussion Papers on Development Policy (165). Stéphane Straub. 2008. "Infrastructure and Growth in Developing Countries: Recent Advances and Research Challenges." World Bank PRWP 4460.

aspects such as the arbitrage between new investments and maintenance expenditures or resources allocation across subsectors. The government can choose to allocate public investment in infrastructure assets (such as roads) that directly influence market production or in assets relevant for human capital accumulation (such as schools and clinics) that may have a lagged effect on growth. Lack of consistent and comparable data on infrastructure spending, stocks, and services in developing countries prevents a robust estimation of this relationship. Moreover, the use of investment flows in developing countries does not reflect the effective infrastructure stocks and the level of services that they provide. This is because the official costs of investments in developing countries are often disconnected from their effective value, mostly due to governmental inefficiencies or institutional weaknesses (see Pritchett 1996, for a more detailed discussion).





Source: SBOC data.

Note: GDP growth on the left axis and growth of public capital spending and construction GDP on the right axis.

84. **Despite the recent decline, FSM public capital spending has been at a much higher level than that of its Pacific Island peers.** During FY2007–12, the average share of FSM public capital spending in GDP was 15.4 percent, considerably higher than that of other PICs. For FY2013 and FY2014, the FSM still spent more than 13 percent of its GDP on public investment, notably higher than its peers, despite the sharp decline in infrastructure investment (Figure 32). However, FSM growth performance over FY2007–12 was considerably inferior to other Pacific Islands peers. Figure 33 shows that during FY2007–12, a higher share of public capital spending was associated with higher growth in these PICs. While Solomon Islands and Vanuatu are separate from the group with high rates of growth, the FSM was the outlier in the sample with almost no change in GDP despite significant public capital spending.



Figure 32. Share of Public Capital Spending in GDP in 2007–12 (%)



Health

50.5

Plan 16-25

Economic

Infrastructure

Source: Author's calculated from various World Bank, IMF, and FSM Reports. Figure 33: Vertical Axis refers to average GDP growth, and horizontal axis refers to share of capital spending in GDP (%).

The sectoral priorities of FSM capital spending in infrastructure has been guided by the 85. IDP 2004–2023, which essentially reflects the priorities specified in the Fiscal Procedures Agreement for the amended Compact. For the CIG, first priority was given to education, health, water supply, wastewater, and solid waste and second priority to economic-development-related projects such as roads, airport and seaport improvements, and energy-related projects. According to the IDP, water supply or wastewater and education sectors have the largest allocation of funds at 19 percent and 18 percent, respectively. The economic infrastructure in aggregate accounts for about 48 percent of all infrastructure investments.



8.1

50.0

Actual 04-13

Figure 34. Sectoral Composition of Infrastructure Investments: Plan for FY2004–23 versus Actual Commitments in FY2004–13 and Plan for FY2016–25

Source: Calculated based on SBOC project data, IDP 2004–2023, and IDP 2016–2025.

4.3

48.0

Plan 04-23

40%

20%

0%

86. Sectoral composition of approved projects indicates that, in reality, economic infrastructure received the top priority in FY2004–13 instead of being the second priority as specified in SDP 2004–23. Figure 34 compares the allocation of resources across the sectors as outlined in the two IDPs and the actual commitments in FY2004-13. Apparently, the share of economic infrastructure does not differ notably between the three cases. In particular, there is a high degree of similarity between actual allocation in FY2004-13 and planned allocation in IDP 2016-2025.

Compared to IDP 2004–2023, the other two plans allocate much higher shares for education and health at the expense of the water supply, wastewater, and solid waste sectors.

87. **Despite this emphasis on economic infrastructure, the FSM economy performed poorly over the decade between FY2004 and FY2013.** During this period, infrastructure investment picked up significantly with the operation of the PMU. Some other PICs spent less on economic infrastructure investment with regard to share in total capital spending and less on education but still achieved relatively good performance. Both Samoa (for 2008–10) and Solomon Islands (for 2010–14) spent around one-third of their capital spending on energy, roads, telecommunication, and agriculture and about 11–14 percent on education. Samoa spent less on capital spending than the FSM, on average, just 8.6 percent of GDP over 2007–12 and grew by about 1.5 percent a year on average. Solomon Islands even recorded an average growth rate of 4.5 percent over 2010–14. These examples illustrate that while composition of infrastructure investment may matter for growth, there are other decisive factors behind poor performance of the FSM economy that may constrain the FSM's economic performance over the long term.



Figure 35. Composition of Capital Spending in Samoa, Solomon Islands, and the FSM

Source: Budget data, Ministry of Finance Samoa and the Solomon Islands, FSM IDP 2016–2025. For Samoa, during 2008–10 and the Solomon Islands, 2010–14.

88. **The IDP 2004 allocation of infrastructure grants among the states adopted a largely per capita-based formula instead of a need-based approach.** Actual allocation for FY2004–13 broadly reflected this formulae, with Chuuk being the largest recipient. The SGs accounted for 44 percent of all resources for approved projects during FY2004–12. However, Chuuk is the most populous state, but per capita capital spending for Chuuk was only about US\$1,350. This is higher than in Pohnpei but is only about half of Yap and Kosrae, the two smallest states with regard to population. In addition, the geographical allocation as well as the sectoral allocation in this period was considerably affected by the US\$42 million Weno Road Project in Chuuk, which was one-quarter of the total approved resources for FY2004–13. Taking out this large project, each Chuuk resident (where poverty is most concentrated) only received one-fifth of their peers in Yap and Kosrae, and economic infrastructure accounted for 25 percent of total allocation.



Figure 36. Approved Infrastructure Projects (FY2004–12)

3.3 Efficiency Review

89. Since weaknesses in PIM can negate the argument that fiscal resources allocated to public investments could enhance economic prospects, attention to the processes that govern public investment selection and management is critical. This section adopts a recent World Bank analytical framework to review the PIM in the FSM. The framework highlights the eight critical features commonly observed in countries with an efficient system of PIM. These features cover all project cycles and are essential for minimizing systemic loopholes, ensuring value for money, and achieving intended goals of development strategies. They are considered to be 'must-have' features, not with the intention of establishing a gold standard but to provide a logical and internally consistent system that even a low-capacity country should try to follow to establish basic disciplines for project selection and management. Lack of reliable data and information in the FSM, however, prevents a full coverage of all must-have features of this framework, as depicted in figure 37.





Source: Raijaram Anand, et al. 2010. "Framework for Reviewing Public Investment Efficiency." World Bank Policy Working Paper 5397.

Note: CBA = Cost-benefit analysis; CEA = Cost-effectiveness analysis.

90. **Strategic guidance and preliminary screening.** The FSM SDP 2004–2023 and its third volume, IDP 2004–2023, provide guidance for the identification of infrastructure projects. The project selection also takes into account consultation with the states, with consideration of funding availability from the Compact and other sources. The IDP is overly broad and ambitious. It identifies an investment of US\$2.3 billion spread across 750 projects from FY2003 to FY2017. The IDP has a fairly broad coverage spreading over 11 different infrastructure sectors. There are no explanations or justification for the selection or prioritization of individual projects. The IDP was prepared by the Department of Transport, Communication, and Infrastructure (DTCI) in consultation with the states but there was no participation of independent experts to guide the formulation of strategic priorities.

91. IDP 2004–2023 adopted a multiple criteria assessment (MCA) with a long list of criteria for preliminary screening of projects, including impact on the economy, health and safety of the community, contribution toward the development of the FSM workforce, potential social benefits and environmental impact, viability, sustainability, and potential impact on the private sector development. There were no guidelines on whether the adoption of criteria differs across states, sectors, or size of projects. A long list of criteria may increase the subjectivity and reduce the level of strategic focus of the selected projects to achieve the ultimate goal of economic self-sufficiency by 2024. Lack of a clear priority can undermine the feasibility of development plans because of the resulting low allocative efficiency. Although the sectoral allocation of resources during FY2004–13 broadly followed the IDP, the outcomes differed remarkably from the plan. The FSM was not able to promote private sector development, one of its main targets for economic self-sufficiency.

92. The lack of robust need-based analysis for the allocation of resources across sectors and states is another factor that can contribute to undermining the potential impact of infrastructure projects (GAO-14-243T 2014). According to the IDP 2004 - 2023, education, health, and public utilities receive the first priority, and physical infrastructure comes second in the sectoral allocation. The distribution across the four states follows a formula determined by an FSM law. All these criteria, sectoral priorities, and allocation formulae remain broad and not based on robust evidence to ensure close connection between selected investments and intended development outcomes.

93. **Project appraisal.** There are no well-defined standardized central guidelines in the FSM for project appraisal. The majority of projects in the IDP 2004-2023 were prepared by the states that also have limited capacity in undertaking robust appraisals. The few existing guidelines for Compact projects focus on the fiduciary and procurement procedures and inadequate attention paid to economic benefits of projects. For public projects under Congress appropriation, the proposers have to fill in a simple template, the Project Control Document that only contains information about cost, location, timelines, and requested source of funding. Like the majority of developing countries, there is also no independent review of appraisal of project proposals in the FSM, even if the projects are funded and appraised by donors. An independent review of appraisal is of importance to counter optimism bias, an empirical tendency to systematically overestimate benefits and underestimate costs in project appraisals. An independent review by the government can also consider domestic conditions and capacity constraints, local impacts, and prospective developments of which a donor may not be fully aware.

94. The appraisal system in the FSM shares similar characteristics of a typical aid-dependent country, in which the appraisal of donor-funded projects relies on donors procedures. Where public investment is fully financed from domestic sources or where aid is largely in the form of budget support, weaknesses in government capacity to appraise projects create an immediate risk that low-quality projects will be accepted into the budget and implemented. This is evident in the appraisal of public projects appropriated by Congress. Apart from the information provided in the Project Control

Document, which basically provides only information about costs, location, and time frame, there is no formal appraisal to assess whether the projects will bring economic benefits to the society.

Box 6. Independent Review of Appraisal in Belarus and Ireland

Belarus. The State Appraisal Agency was established with a mandate to appraise all public investment projects. It charges a fee of 5–10 percent of project preparation costs to the implementing agency. The agency consists of about 70 senior experts on construction and other capital investment. In most cases, the agency provides its appraisal result within 30 days. With sufficient resources available from fees charged to the proposal-submitting agencies, the State Appraisal Agency has managed to recruit highly qualified technical professionals and has provided extensive training to ensure appraisal quality. The agency claims that about US\$300 million was saved by its review in 2006.

Ireland. The Department of Finance requires that line departments involve external review in their appraisal. Agencies are allowed to carry out their CBA in-house, but they have to commission outside experts to review the results of their appraisals. For example, the Department of Transport now engages professional companies to carry out audits of compliance with the Department of Finance guidelines and audits of progress in project implementation. The projects to be audited are selected by the department's Investment Monitoring Group. The auditors engaged are required to submit detailed reports of all audits carried out, setting out their findings and making recommendations where appropriate.

Sources: Cho 2008; Ferris 2009.

95. **Project selection.** Making good investment choices and active management of the asset portfolio are key to efficient investment. Project selection is widely viewed as the most critical stage of the investment management process because the decision making is often under strong pressure from various interest groups, so it is difficult to ensure an airtight technical process for the selection. However, good international practice shows that the robust results of sound project appraisal can help provide useful technical inputs to facilitate the decision-making process.





Source: IDP 2016–2025.

96. The revised IDP (2016-2025) includes a selection process for FSM infrastructure projects during this period, as depicted in figure 38. The process includes several good elements needed for having a sound portfolio of investment. The foundation of the selection is an infrastructure review that analyzes the current status of 10 infrastructure sectors in the FSM and assesses the demand for services in each sector. Based on the review, a long list of sector projects is produced for each state. In the next step, project prioritization is conducted through several filters by a working group, which comprises representatives of the executives, legislatives, infrastructure managers, and civil societies. In the first step, the priority project lists are formulated taking into account the indicative funding envelope and the current Infrastructure Planning and Implementation Committee listings and priorities. Projects are then further prioritized by implementation timing, considering projects' expected impacts and availability of resources. The final filter of the priority projects to the overall strategic objectives. A cost benefit analysis (CBA) however is not included in this process.

97. However, the engagement of the JEMCO and OIA (Figure 39) imposes further administrative layers to the current appraisal process, which still lacks robust quantitative assessment of economic benefits of individual projects. It is common in a good PIM system to include CBA in the prioritization of projects. In addition, the adoption of an MCA approach for rating with a large number of criteria (nine as in IDP 2016–2025, covering economic, social, environmental, and institutional aspects) runs against the risk of diluting the strategic focus.³¹ The application of the same weights for each of the nine objectives, irrespective of sector or geographic location of the projects, indicates that further gain in allocative efficiency can be achieved by setting priorities in accordance with different needs of the states. Finally, limited availability of information about the risks, perhaps because of the lack of assessment and valuation of risks associated with projects, can also result in suboptimal decision making and undermine the efficiency of the portfolio.

98. **Project implementation.** Various reports point to the limited implementation capacity as a major factor behind the sluggish performance during FY2004–08. In this period, the FSM was only able to implement US\$5 million a year on average and hence accumulated about US\$50 million grant arrears.³² The performance improved significantly after the FSM PMU was established and became fully operational. Greater control over the timing and execution of infrastructure projects has been shifted from the SG to the NG and helped strengthen the professionalism of project implementation. As a result, the performance improved considerably in the second five years of the amended Compact, with about US\$21 million allocated to infrastructure projects every year.

99. Other factors affecting the implementation include the lack of adequate and competitive construction infrastructure and local skilled labor and the inability to secure land lease for public projects.³³ In addition, the weak federal structure of the FSM is another factor that contributes to inhibit successful implementation of CIGs. Each state has its own constitution and authority over budget policies. As a result, it is difficult for the NG to align the infrastructure portfolio with the FSM national priorities. The states have made their own decisions about the distribution of funds between the sectors from their allocated amounts.

100. While the operation of the PMU has clearly helped clarify roles and responsibilities for project implementation and improve focus on managing the total project costs over the life of each project, persistent weak internal control remains a critical issue that can impede the implementation process. A report of the GAO in 2013 pointed out that only half of the financial statement audit opinions for the FSM are unqualified for FY2006–11, and 17 out of 18 financial statement audits for those years from the FSM found material weaknesses and significant deficiencies, resulting in the entities receiving qualified and disclaimed audit opinions with regard to internal controls over financial reporting.³⁴

101. The monitoring of projects' implementation remains a major problem, which has partially been caused by the somewhat cumbersome institutional arrangements for M&E. At the federal level, the SBOC had in the past been in charge of the oversight of the overall program, and it monitored the progress of the infrastructure projects through the PMU within the FSM DTCI. Each state also has an entity responsible for providing oversight of infrastructure projects within the state. Given the federal structure, the SBOC does not have sufficient autonomy to impose the reporting requirements on the states. An indicator of this issue is the persistence of issues related to availability, quality, and timeliness of the regular monitoring reports. The dissolution of the SBOC is expected to further complicate institutional arrangements for M&E.

³¹ Kosrae also adopts MCA in appraisal but has only two criteria: CBA and regional development.

³² FSM 2014, Amended Compact Review.

³³ Five-Year Review of Amended Compact, 2012: 41.

³⁴ Report GAO-13-675: 89.

102. The upstream institutional arrangements for PIM in the FSM involve a complex system with engagement of the GoFSM, the JEMCO, and the OIA before and after the award of funds. Before the annual awarding of Compact funds, the FSM must submit a development plan that identifies goals and performance objectives for each sector. In addition, the United States and the JEMCO are to approve annual sector grants and evaluate the country's management of the grants and their progress toward program and economic goals. The postaward oversight function is exercised both by the FSM government and by the OIA. The former is required to monitor day-to-day operations of sector grants and activities, submit periodic financial statements and performance reports for the tracking of progress against goals and objectives, and ensure annual financial and compliance audits. The OIA evaluates the quarterly and annual performance and monitors the sectoral grant outlays as well as the fiscal performance of the government.



Figure 39. Amended Compact Implementation Framework

Source: GAO Report GAO-08-859T.

103. **Completion review.** The separation between the project implementation agency and the operation and maintenance of the generated assets requires a well-established mechanism for the handover of assets. In the FSM, the weak compliance with requirements for completion reporting is another factor behind the suspension of new infrastructure grants during FY2013–15. According to the existing financing procedures, the FSM needs to prepare and submit several project completion documents that, among others, state the amount of grant used and the de-obligated or leftover grant money from each of the completed projects. The FSM could strengthen initiatives to stay on top of the paperwork, largely due to weak coordination between the PMU, the SBOC, the DOFA, and the states.

104. **Capacity.** In addition to sound institutional arrangements and robust approaches and techniques, competent capacity is another prerequisite for effective PIM. Thin capacity for qualified individuals can be a critical bottleneck for the FSM, recent census data show that only 4 percent of the FSM population has a higher education degree. This binding constraint was illustrated with the extremely slow implementation progress of infrastructure grants in the first five years of the amended Compact and the import of external expertise with the PMU operation partially solved the issue and resulted in some initial implementation success. However, the import of outside experts only represents a temporary solution and in the longer term, concerted efforts are needed for the development of local capacity, not only in project implementation but also in the other phases of PIM.

105. **Outcomes.** An indicator of efficiency of public infrastructure investment is the large amount of unallocated grants as well as undisbursed resources from approved projects accumulated over time. It was reported that during FY2004–14, about US\$150 million worth of projects, out of US\$252 million available according to the amended Compact, was approved.³⁵ About half of these grant arrears were the result of a slow start from FY2004 to FY2008. The other half resulted from the standstill of grant approval during FY2013–15. Of the approved amount during FY2004–13, 13 percent remains undisbursed as of the end of FY2013 (figure 40). There is also room for improvement with regard to project completion. During FY2004–12, the FSM completed only 6 education-related projects out of 19 prioritized projects approved by the JEMCO.

Figure 40. Infrastructure Grants: Allocation and Implementation, FY2004–13



Source: SBOC data.



Figure 41. Public Investment, Private Sector, and GDP growth (FY2004-14)

Source: SBOC data, GDP, and private sector growth on the right-hand-side axis. *Note:* PI = Public investment.

³⁵ FSM, FY2014 Annual Report for Amended Compact.

106. There seems to be a weak nexus between public capital spending and the IDP's development goals, especially private sector growth. Except for FY2010 and FY2011, the private sector contracted every year in the first decade of the amended Compact despite large public capital spending. On average, the private sector contracted 2.5 percent a year, even faster than the contraction rate of GDP. As a result, the contribution of the private sector to GDP declined, from about 24 percent in FY2004 to just 19 percent in FY2014.

107. Weak correlation between public capital spending and GDP as well as the private sector over the last 10 years seems to indicate that public infrastructure investment did not live up to expectations in relieving growth bottlenecks and binding constraints. Infrastructure investment is complementary to other investment, so excessive infrastructure investment has no added value, but if suboptimal infrastructure investment constrains other investment, it constrains growth (Newbery, 2012). Infrastructure investment in the FSM appears to have strong short-term impact on the construction sector, but its medium- to long-term effects on output and productivity are not likely to improve unless critical constraints are removed.

3.4 IDP 2016–2025

108. **IDP 2016–2025 introduces several improvements over its predecessor, IDP 2004, for preliminary screening of projects, institutional arrangements, and M&E.** The prioritization of projects is facilitated with the adoption of a multi-criteria assessment in which the contribution of each priority project to the IDP's nine strategic objectives is rated to provide a strategic rating out of 10. In addition, the prioritization will be reviewed at regular intervals as part of the planning and budgeting process. Improved prescreening of projects and a shift in priorities toward economic infrastructure sectors are expected to lead to improvement in allocative efficiency.

109. A particular improvement is the clarification of the roles and responsibilities of different agencies involved in infrastructure investment management. A report on institutional strengthening was prepared based on review of background reports and data, as well as consultations with stakeholders. The proposed arrangements received strong endorsement from all state governors and the president. The essence of the proposed implementation model is the reform of the PMU, which will now focus on program management whereas project management will be delegated to the states by the formation of the PMOs. The PMU will be responsible for project completion analysis as well as for provision of ongoing support to each state to ensure standards are developed and shared.

110. The proposed delegation of the project management functionality to the states can have both advantages and disadvantages. On the one hand, the management agencies are based in the states and hence will be better informed about local information and needs, have better oversight, and can deal with implementation issues more effectively. Improved access to project implementation information can contribute to improving M&E. Limited capacity of the states is expected to be addressed by the proposal for having a single external party to undertake the initial PMO role in each state. On the other hand, the establishment of the state PMOs will impose one more administrative layer to the system, and the increased complexity of the institutional arrangements in combination with empowered role of states agencies in PIM in a weak federal structure context can make it more difficult in holding involved agencies accountable. The examination of PIM in selected aid-dependent countries in a recent World Bank research suggests that rationalizing and mainstreaming the PIUs is one of the priority reform areas for PIM system in these countries (box 7).

Box 7. Main PIM Reform Priorities in Aid-dependent Countries

The following priorities for the PIM system reform are derived from (a) the current system functionality synthetized from the case studies of a recent World Bank research project and (b) assessment of priority areas at the margin for strengthening the PIM system functionality. Case studies include the Democratic Republic of Congo, Lesotho, Sierra Leone, Uganda, Zambia, and Bosnia and Herzegovina.

- Preliminary screening of projects against comprehensive, authoritative, and costed national and sector strategies
- Building capacity for project preparation and appraisal
- Consistency between development and recurrent budgets
- Strengthening budget gatekeeping
- Better insulation of investment spending from donor funding volatility
- More effective project accounting, reporting, and monitoring
- Strengthening implementation of procurement
- Rationalizing and mainstreaming the PIUs
- Basic postproject review, effective compliance audits of projects by supreme audit institution and more effective asset management, and service delivery

Source: World Bank Group. 2014. The Power of Public Investment Management: Transforming Resources into Assets for Growth.

111. **The allocation of infrastructure funds across four states appears to be similar to IDP 2004.** It remains unclear whether the newly proposed allocation was developed based on a robust needs analysis or still follows the per-capita formulae. Without a further analysis of the demand for different types of infrastructure services and the identification of binding constraints, the large potential gains in allocative efficiency associated with shifting resources across sectors or states may not be fully realized.

112. Further gains in allocative efficiency can be achieved with better project appraisal and

selection. The focus of the institutional arrangements proposed in the new IDP is technical efficiency associated with implementation. Nevertheless, limited attention has been paid on the appraisal and selection of the projects. CBA is either not a standard component of project appraisal yet as it is in almost all countries, or the quality of the analysis in the FSM is not independently reviewed. While some projects may generate positive economic benefits, it is rare to assess their relative value for money. Moreover, good practices in project appraisal, in the United Kingdom for example, also give attention to business case justification, project management arrangements, risk mitigation, and procurement strategies.

113. The priority of IDP 2016–2025 to accelerate CIG commitment and disbursement would need to be complemented with local capacity building. It is proposed that in FY2016 alone, projects worth more than 50 percent of the committed amount for FY2004–13 will be implemented, and the planned amount for FY2016–19 is three times as much as the amount implemented in the first 10 years of the amended Compact. The plan includes fast-tracking spending of infrastructure grant arrears (US\$126 million) of the first decade of the amended Compact. The establishment of project implementation offices in the four states and the recruitment of external agencies, as recommended by the IDP, can help boost the implementation in the short term like the foundation of the PMU before. However, the replication of the PMU model in the states alone may not be sustainable unless it addresses the remaining issues, including weak local capacity or inadequate quality of project implementation. Other current problems such as lack of reliable and timely data and weak monitoring can be exacerbated by the proposed arrangements, which moves the implementation responsibilities to the states.

3.5 Conclusion

114. Poor performance in the first half of the amended Compact, with regard to both the economy as a whole and the infrastructure sector, has brought the FSM development strategy such as SDP 2004–2023 and IDP 2004 into question. The apparent lack of priorities and limited connection between the projects and intended outcomes have made these strategic documents an inefficient tool for preliminary screening of projects. In an effort to improve the strategic documents, it was agreed to dissect the SDP into 3–5 year plans with clear targets and appropriate resources for implementation. Action Plan 2023 was released in February 2015 and focuses on the activities to be undertaken during FY2015–17. The updated IDP for 2016–25 was released in October 2015, which documents the priority needs for the first time, including climate change adaptation, in four stand-alone state plans. Prioritization of projects will be reviewed at regular intervals.

115. The feasibility of IDP 2016–2025 will be contingent on removing structural impediments.

The plan aims to accelerate infrastructure spending but seems to envisage limited measures to address the root causes of slow implementation in FY2004–15. In addition to structural economic issues such as remoteness, it takes time to overcome binding constraints such as inadequate capacity of local contractors or implementation agencies, customary land titling, or inadequate legal framework and institutional arrangements. The absence of a robust needs-based approach to project selection and negligible changes in sectoral allocation raises questions about attainment of the intended goals of improving efficiency.

	Desired Impact	Short-term Actions	Medium- to Long-term	Lead
			Actions	Agency(s)
Improve allocative efficiency	Strengthen the identification and selection process for infrastructure projects.	Undertake robust need analysis for sectors and states to strengthen screening criteria and prioritization approach.	Ensure participation of stakeholders, especially the private sector, in the preparation and review of development plans.	DTCI
	T. J.		Formulate a sound legal framework and approach, build local capacity for project appraisal.	DOFA
Improve technical efficiency	Implement the required infrastructure on a timely basis.	Strengthen the oversight mechanism to effectively monitor performance of infrastructure investment.	Balance acceleration of infrastructure spending and building implementation capacity in the states.	DCTI, state PMOs, DOFA

116. A balanced approach is recommended in the short to medium term with a more realistic pace of infrastructure spending and in-parallel fixing of current weaknesses in the PIM system. Spending priority in the short term can be given to infrastructure investment arears and perhaps a small number of the top-rated projects. At the same time, adequate attention should be given to building implementation capacity, especially the project implementation offices in the states, improving information availability, and strengthened enforcement of monitoring and reporting for improving technical efficiency. Heavy reliance on external expertise can help boost spending in the short term, but it is unlikely to be sustainable in the longer term, especially under an expected tighter fiscal situation.

117. In the medium term, improvement of the priorities across and within sectors as well as of the states can help strengthen strategic screening and increase allocative efficiency. A good start can be a robust need analysis for states and sectors, which will then be the foundation for improvement

of specific criteria and guidelines needed to ensure strategic selection of projects. There is also a need to undertake ex post evaluation of selected completed projects. The DTCI can then lead the preparation of a midterm review of IDP 2016–2025 with inputs of the need analysis and these ex post evaluations. The midterm review of IDP 2016–2025 can also benefit from independent experts and active participation of concerned stakeholders, especially the private sector. Apart from broad-based consultations, the establishment of a body such as an Infrastructure Strategy Board to provide independent expert advice to the Congress and the states to guide strategic priorities or oversee the compliance with the strategy can be considered, and not only for the midterm review of the IDP.

118. **Having an independent agency responsible for M&E of infrastructure projects can be considered.** The agency can produce guidelines and regulations for M&E and ensure smooth and timely information flow as well as the disclosure of information. Independence of evaluation implies that this agency should not belong to the DTCI. Following common practice, it is recommended to put this agency in the DOFA.

119. Finally in the long term, there is considerable room for improvement of allocative efficiency through the development of a robust project appraisal system. This will include the building of local capacity for project appraisal, formulation of a sound legal framework as well as establishing appraisal agencies and mechanism at NG and SG level. Different sectors also demand different appraisal approaches whose level of complexity is expected to be proportionate to the size of projects.

IV. Education Sector Issues

4.1 Introduction

120. The education and health sectors in the FSM, financed largely by CSGs, will likely face shrinking resources due to the grants' expiration planned for 2023. Anticipating the expiration of the CSGs in 2023, the GoFSM (excluding NG) has begun implementation of the LTFF (see chapter 6) to protect against a sudden reduction in service delivery. In this context, to inform future allocations of public expenditure, it is important to understand current expenditure trends and how sectoral spending is linked to outputs. Such an exercise will help identify any potential allocative or technical efficiency gains, which will support improved education and health outcomes in the medium to long term.

121. This chapter explores expenditure trends by economic, functional, and administrative classifications and examines these in relation to sector outcomes. As part of this analysis, the PER benchmarks the FSM with other countries within the region to see how the level of spending and outcomes compare. The analysis attempts to take into account the FSM's relatively low population density and, dispersion and remoteness, which could make the delivery of public goods and services more expensive. A benefit incidence analysis (BIA) is carried out to examine inequities in government allocation of resources for education services and on the public use of these services. Given the expected changes in fiscal space and the changing context, the chapter discusses options for improving resource allocation and expenditures in line with priorities identified.

122. **One challenge faced in producing this chapter was the difficulty in obtaining certain types of expenditure data.** Data on education and health spending broken down by subsector are not publicly reported in the FSM. These data are also not available through the national Department of Education (DoE) or Department of Health (DoH), as the NG does not require that states report data disaggregated in this way.³⁶ Due to lack of standardization across the four FSM states in reporting of education and health spending data, state-level variations in resource allocation could not be explained, including any potential relationship with differences in population density or remoteness. This implies that analysis of spending by various levels of the sector is not possible. More importantly, the fact that these data are not reported or required points to a bigger problem of lack of transparency in how public resources are distributed within the sector. When this information is not generated or disseminated regularly, providers cannot be held accountable for performance.

123. Working within the data constraints, the following chapters highlight core action areas that could help improve return on investment in the education and health sectors. The first subsection of each chapter describes the current structure of the FSM education and health systems. This is followed by an analysis of expenditure and performance trends, which sheds light on emerging challenges. The final subsection highlights key areas where an appropriately designed combination of interventions could help improve the quality of education outcomes as well as health services in the FSM. The examples from international experience are meant to illustrate how broad principles of service delivery have been adapted and adopted in other country settings. The precise nature and design of interventions relevant to the FSM, along with decisions about which type of intervention would be best suited to the varying service delivery environment and needs of the four states, will require deeper situational and further sector-specific analysis. The four states differ vastly in capacity and quality of services delivered. While the core action areas recommended here (with more details provided in the respective concluding sections) broadly apply to all states, the specific actions and their sequencing may vary depending on the state.

³⁶ This PER uses budget data instead of actual expenditures for later sections.

	Desired Impact	Short-term	Medium-term	Long-term	Lead
	-	Actions	Actions	Actions	Agency(s)
Improve	Better inform	Improve public	Design and build	Build	National
institutional	policy makers and	availability and	GFS for the social	administrative	and state
arrangements	create more	reporting of	sectors to	capacity for	DoEs and
	awareness and	social sector	incorporate	planning and	DoHs
	scrutiny among	inputs, outputs,	elements of	budgeting at local	
	citizens to	and outcomes	standard health and	health and	
	improve	across the	education GFS.	education	
	efficiency.	GoFSM.		facilities.	
Improve	Move toward a	Review division	Modify resource allo	cation formulae to	National
allocative	needs-based	of	reflect health and edu	cation sector needs	and state
efficiency	approach to	responsibilities	across states and ince	ntivize	DOFAs,
	resource	(clarify areas of	performance at the sta	ate level tracked	DoEs,
	allocation, with	overlap and	using an appropriate	indicator, such as	DoHs
	the incentive	gaps) through	enrolments, primary-	to-secondary	
	framework	the relevant	school transitions, pe	rformance on the	
	encouraging	bodies.	early grade assessment	nts, or health	
	outcomes.		service and performan	nce levels.	
	Reduce gaps in	Undertake	Analyze demand-	Align curricula	National
	knowledge on	education sector-	side constraints to	with economic	and state
	education	specific analysis	enrolments at the	priorities and	DoEs
	expenditures and	based on	primary and	opportunities at	
	performance and	improved	secondary levels to	the state and	
	align the	subsector data to	make	national levels	
	education system	examine	recommendations	and improve the	
	to support the	efficiency of	on improving	progressiveness	
	FSM's economic	large spending	enrolments (and	of education	
	priorities.	categories such	equity).	spending.	
		as			
	T	administration.	Carl stat 1 an	D . 1 1 1 1.1.	N ₁ , t ¹ ,, 1
	Improve quality	Undertake health	Conduct study on	Redeploy health	National
	and sustainability	sector-specific	quality of care and	personnel	and state
	of nearth care.	analysis based		consistent with	DOHS
		on improved	practices at	service	
		subsector data to	alinias to inform	stratogy	
		efficiency of	ontimal service	strengthen	
		large spending	delivery	accountabilities	
		categories and	organization for	of managers	
		spending equity	each state	introduce	
		and explore	including trade-offs	appropriate	
		health financing	in providing	incentives for	
		options to ensure	services through	performance	
		long-term	smaller.	where capacity	
		sustainability.	decentralized	exists, and	
			facilities versus	institute	
			bigger,	management	
			consolidated ones.	policies that	
				sanction low	
				performance.	

Improve technical efficiency	Improve quality of teaching, by enhancing knowledge and skills of teachers and competitiveness of the teaching profession.	Undertake an early grade learning assessment and classroom observation to inform teacher training.	Train teachers to address key learning gaps identified through early grade assessments.	Reform teacher management policies toward retaining effective teachers, consider piloting pay-for- performance programs in states with adequate capacity.	National and state DoEs
	Improve accountability of schools to local communities.		Build capacity for school-based management, such as through school grants.	Create mechanisms for stakeholder participation in managing schools.	National and state DoEs
	Improve preventive health behaviors, including through better access to preventive health services.	Evaluate options for sin tax and diagnose factors underlying low immunization and maternal and child health services coverage.	Strengthen pharmaceutical procurement by improving bidding processes, internal control procedures, procurement planning, and inventory reporting.	Where appropriate, build capacity to enable localized provision of services, including administrative capacity for planning and budgeting.	National and state DoHs

4.2 Structure of the FSM Education System

124. **The structure of the education system of the FSM is very similar to the U.S. model.** There are four levels: early childhood education (ECE) for ages 3–5, elementary for ages 6–13 (grades 1–8), secondary for ages 14–18 (grades 9–12), and postsecondary. Education is compulsory only until grade 8 or when the student turns 15. The COM is the major tertiary education provider in the country. The COM has a national campus located in Pohnpei and state campuses in each of the FSM states. The COM offers AA/AS and certificate-level programs in a range of subjects, as well as short training programs. The COM operates a Fisheries and Maritime Institute in Yap. Finally, there are limited technical and vocational education training programs aimed at students at the secondary level.

125. With regard to institutional responsibilities, the FSM national DoE sets standards, while the state DoEs are responsible for curriculum and instruction. Responsibility for carrying out the functions of the NG in education rests with the national DoE. The department works in collaboration with the state DoEs and the COM in planning, developing, and promoting GoFSM education goals. The constitution does not clearly delineate the powers and responsibilities of the states and the NG. A constitutional convention in 1990 sought to clarify the issue by proposing that for education, the NG's role should be limited to "setting minimum nationwide standards, coordinating state activities and foreign government assistance, and providing training, TA, and support for postsecondary education programs." However, the states have autonomy in setting their own curricula, tests, and standards.

126. **In 2014, the FSM had a total of 129 elementary and 33 secondary schools serving a student population of 26,554 across its four states.** Chuuk, the largest state with nearly half of the country's population, operates 60 elementary schools, employing 576 teachers and serving 9,077 students, and 19 secondary schools, employing 201 teachers and serving 2,385 children. Kosrae, in comparison, with the smallest population (7 percent of the population) operates 7 elementary schools, employing 157 teachers serving 1,443 students, and 1 secondary school, employing 52 teachers serving 675 students. This coverage of services supported primary net enrolment rates (NERs) that vary from 83 percent in Chuuk to 91 percent in Yap, 92 percent in Pohnpei, and 95 percent in Kosrae (HIES 2013; see figure 42). Secondary NERs stood at 53 percent in Chuuk, 59 percent in Kosrae, 64 percent in Yap, and 65 percent in Pohnpei.



Figure 42. NERs, by FSM States, 2000–2013

Source: Data for 2000 and 2010 are from United Nations Children's Fund (UNICEF) 2012. Estimates for 2013 are based on authors' calculations using the 2013 HIES.

127. In 2014, the FSM had a total of 2,230 teachers and staff employed across the states in elementary and secondary schools. Teachers accounted for 82 percent of all staff, with the remainder engaged in administrative and other tasks. Chuuk had the largest share (40 percent) of all teachers and staff, followed by Pohnpei (30 percent), Yap (18 percent), and Kosrae (12 percent). Personnel cost

ranged from 55 percent to 94 percent of school budget. Teachers and staff employed across the states in elementary and secondary schools represent around one-third of total government employees and declined slightly between FY2013 and FY2014, possibly due to the implementation of the LTFF. While expenditure data on wages of teachers and school and administrative personnel is not available, back-of-the-envelope calculations on personnel cost per teacher or per staff employed suggest that teacher salaries are broadly in line with the average wage earned by SG employees.

128. Student-teacher ratios (STRs) indicate that service delivery is organized to overcome challenges of remoteness and places schools as close as possible to beneficiaries. The geography and population contexts of the states vary significantly and are reflected in state-specific STRs (figure 43). Consider the STR of 8 in Yap and 18 in Pohnpei. Pohnpei has the same population density as Yap (Table 1), but overall the population is less dispersed, with a significantly smaller fraction (5 percent) resident in the state's outer islands (OI) (43 percent in Yap). The lower STR in Yap thus serves to compensate for the state's higher population dispersion. Kosrae is unique among the states in that its entire population is resident on one island only, but the state still has the thinnest population density in the country and, to compensate for this, the lowest primary STR. Chuuk is the most densely populated among the four states and, compared to Yap, has a significantly smaller share of population resident in the OI. It would be expected that the STR is comparable to that in Pohnpei, but it is much lower. This is because Chuuk has the lowest enrolment rate in the country; the STR is lower than expected due to the number of children out of school. Thus, overall the STRs, combined with enrolment rates in each state, indicate that the distribution of service delivery inputs aims to bring services as close as possible to beneficiaries.



Source: GoFSM 2014; author's calculations.

129. The FSM's education system underpins a labor market characterized by relatively low formal employment, high unemployment, and a high share of migrant labor. The 2010 census suggested that around half of the FSM's labor force was in formal employment while a quarter was engaged in subsistence, with the remainder unemployed. Of those engaged in the formal sector, around half were engaged by the private sector. In the 2013 HIES, among adults of age 25 years and older, higher education attainment was associated with a higher likelihood of being engaged in paid employment (Figure 44).³⁷ Among adults who completed high school or an AS, paid employment was 15 percentage points likelier than among those who completed elementary school only. Half and three-quarters of those with college and postgraduate degrees, respectively, were likely to be engaged in paid employment. The Organisation for Economic Co-operation and Development (OECD) migration database reports that over 31,000 Micronesians are living in the United States (equivalent to 30 percent

³⁷ Unpaid employment includes producing goods for own and/or family consumption; unpaid family worker (family business, and so on); help with basic household duties inside (washing, cooking, cleaning, and so on) and outside (gardening, maintaining lawn, and so on); and volunteer work.

of the domestic population). More than 60 percent of migrants to the U.S. mainland were most likely to be in paid employment, and the ratio of private-to-public sector jobs is high. Wages for paid migrant workers suggest that the majority are in labor-intensive industries. Anecdotal evidence suggests that constraints to U.S. labor markets include high cost of flights to the United States, weak education (literacy, numeracy), and the lack of familiarity with living in a cash economy without the support of extended families.



Figure 44. Main Activities among Adults of Age 25+ Years, by Education Attainment, FSM, 2013

4.3 Expenditure Trends

130. The FSM spends around 20 percent of its recurrent expenditure on education and this trend has remained flat over the past five years. Between FY2008 and FY2014, nominal recurrent expenditure on education hovered just under US\$40 million per year.³⁸ In real terms, expenditure declined slightly between FY2010 and FY2012, before flattening out to just under US\$30 million annually. Education spending is largely funded through CSGs, which has declined in real terms. Between FY2010 and FY2014, this constituted roughly 20 percent of total recurrent spending by the government. In FY2014, SG education expenditure ranged from 30 percent of total recurrent expenditure in Yap to 41 percent in Chuuk. This pattern in spending for SGs has held fairly consistently since FY2010.

131. **SGs' expenditure combined accounts for 90 percent of the FSM's recurrent expenditure on education (Figure 47).** Operating under a federated structure, the bulk of spending responsibilities on education in turn rests with the states. Chuuk absorbs the largest share (34 percent in FY2014), followed by Pohnpei (29 percent), Yap (15 percent), and Kosrae (11 percent). Per capita expenditures vary significantly between states (figures 48 and 49), with expenditures in Yap and Kosrae almost twice as high as those in Chuuk and Pohnpei. In FY2014, Kosrae incurred the highest per capita public expenditure among all states, at US\$1,862 per population ages 5–19 years, followed closely by Yap

Source: HIES 2013; author's calculations.

³⁸ With data not available separately, available reports before 2008 combined spending on the health and education sectors.

(US\$1,657), with Pohnpei and Chuuk spending almost half as much at US\$915 and US\$793, respectively. Further, Kosrae and Yap have recently experienced significantly larger increases in per capita expenditures in real terms, compared to Pohnpei and Chuuk.³⁹



Figure 47. Nominal Public Expenditure on Education, FY2008–14, at the State and National Levels



Figure 48. Nominal Per Capita Public Expenditure on Education, by States, FY2008–14

Figure 49. Real Per Capita Public Expenditure on Education, by States, FY2008–14



Source: GoFSM 2014; author's calculations.

³⁹ Between FY2012 and FY2014, real per capita expenditure rose by 15 percent and 12 percent in Kosrae and Yap, respectively, and by 6 percent in Chuuk, with no significant change in Pohnpei. This partly reflects small declines in the populations of Chuuk and Kosrae, while in Yap, the population increased slightly but real expenditure growth in the states outpaced this increase.

132. For each SG, most of the expenditure is incurred on personnel and consumables. A closer look at the composition of these per capita expenditures across the SGs is revealing (Figure 50). The largest category of expenditure is incurred on personnel—each state spends between 44 percent (Kosrae) and 66 percent (Chuuk) of its expenditure on teachers and other staff. The next largest category is consumables, absorbing between 18 and 31 percent of expenditure in Pohnpei and Yap, respectively. An important feature of the spending is that even though the share spent on personnel is smaller in both Kosrae and Yap than in Chuuk and Pohnpei, the amount the former two states spend in nominal terms on personnel is significantly higher than that in the latter two states, driven by differing STRs across the states. Also notable in Figure 50 is the higher amount spent on consumables in Yap and Kosrae, which in some states likely reflects the logistical complexity of getting learning materials and other school equipment to remote schools.⁴⁰



Figure 50. Composition of Per Capita Government Expenditure on Education, by State, FSM, 2014

133. Within each state, a large share of the education budget is allocated to administrative and other state-level programs, but it is not clear how schools benefit from this highly centralized administrative spending. A breakdown of education expenditures by level of facility was not available for any of the states, so this report attempted to use budget data for 2014 to explore how resources were allocated within the sector in each state (box 8). Elementary schools were allocated roughly 40 percent of the budget in each state, except in Yap where the share stood at 23 percent. Secondary schools were allocated between 15 percent (Yap and Kosrae) and 23 percent (Chuuk). Overall, education administration costs combined with state-administered programs that could not be broken down by school level were quite large in each state, varying from 26 percent in Pohnpei to 46 percent in Yap. More quantitative data is needed to ascertain whether or how schools benefit from this highly centralized administrative spending.

Source: GoFSM 2014; author's calculations.

⁴⁰ Expenditure classifications by type (for example, personnel) were only available for financing that was reported on in Annual Compact Reports. For total education spending, there are at times significant differences between the amounts reported in the Annual Compact Reports and those in the government audit reports. In FY2014, these amounted to a total of US\$874,376 (Kosrae), US\$1,122,160 (Pohnpei), and US\$477,911 (Yap). This expenditure is thus at the moment 'unclassifiable'.
Box 8. How Are Resources Allocated within the FSM's Education System?

Breakdown of education expenditures by level was not available for any of the states, so this report attempted to use budget data for 2014 to explore how resources were allocated within the sector (Table 10). Budget item categories varied significantly across states, depending on state-specific programs, but allocations to each primary and secondary school in the country were reported, allowing a breakdown of the budget allocations by primary and secondary level and across central and OI. Such an analysis helps inform policy making; strengthen M&E, transparency, and accountability; and build a picture of who benefits from government spending at each level of the system.

Elementary Schools	Secondary Schools	ECE	Administrative and Other
43	15	4	38
42	23	0	35
39	21	14	26
23	15	16	46
	Elementary Schools 43 42 39 23	Elementary Schools Secondary Schools 43 15 42 23 39 21 23 15	Elementary Schools Secondary Schools ECE 43 15 4 42 23 0 39 21 14 23 15 16

Table 10. Budget Allocations for Education Activities, for FSM States, 2014 (%)

Source: GoFSM 2014; author's calculations.

In Kosrae, the largest share of the budget (43 percent) was allocated to elementary schools (grades 1–8), 15 percent to the state's one secondary school, 4 percent to ECE, and a very large share to the 'other' category, which is the budget for central, state-level expenditures (38 percent), which cannot be broken down by level, and in Kosrae include the state DoE; 'curriculum and instructional services'; Division of Facilities, Community Affairs, and Supports; the Special Education Program; the Education Improvement Project; and Workforce and Skill Training. In 2014, Kosrae reported having no public ECE facilities, and further work is needed to understand what the budget earmarked for ECE was used for.

Chuuk has a similar budget allocation pattern as Kosrae, with 42 percent allocated to elementary schools, a slightly higher allocation of 23 percent to secondary schools, no allocation to ECE (although it is possible that the allocation was included under another category but not reported separately), and a large share of the budget (35 percent) allocated to the 'other' category. This category included 'administration and personnel', planning and development, the Central Office, and two regional education centers.

Pohnpei also had budget allocations similar to those in Kosrae and Chuuk for elementary schools (39 percent) and secondary schools (21 percent), but a significantly higher allocation for ECE (14 percent), and 26 percent for other activities that could not be broken down by education level. 'Other' included the Vocational Education Improvement Project; School Improvement Project; Curriculum, Instructional Development, and Specialized Education; Offices of Elementary and Secondary Education; Special Education Program; postsecondary scholarships; and Workforce Development and Skills Training. Like Kosrae, Pohnpei does not report on the number of ECE facilities in the state, but the budget data indicate that the ECE allocation supports teachers and other personnel at 24 facilities.

Yap's budget allocation for elementary school was significantly lower than the other states, at 23 percent, and 15 percent allocated to secondary schools. The state had the highest allocation in the FSM to ECE, and elsewhere reported operating 25 ECE facilities. The 'other' category allocation was comparable to Kosrae and Chuuk at 46 percent and included education administration, budget and supply division, curriculum division, four central school zone offices, cultural programs, and special education, among others.



Figure 51. Budget Allocation for OI and Non-OI Schools, 2014

In each state, per capita budget allocations are significantly higher in the OI than elsewhere in the state. Figure 51 shows per capita budget allocations for elementary and secondary schools in each state—in each case, the amounts allocated to schools at each level are divided by the number of students enrolled at that level. With the exception of secondary schools in Chuuk, the per capita budget allocations are always significantly higher in the OI than elsewhere; however, outcomes are lower than FSM average.

134. When compared to developing country peers, the amount of resources devoted to education is high. Among the two other Pacific Island countries on which internationally comparable expenditure data are available for education-Fiji and the Solomon Islands-the FSM has the smallest GDP, but the highest education expenditure as a share of total government spending (figure 52). The same holds true in comparison with the Caribbean small states, with the exception of Belize, which spends a little more on education. Comparisons on the basis of per capita GDP are even more striking (figure 53)—the FSM is among countries with the highest spending on education, as a share of total government expenditure.



Figure 52. Recurrent Expenditure on Education in

Figure 53. Recurrent Expenditure on Education in Pacific Island and Small Caribbean States, and GDP Per Capita, 2013





Sources: EDStats 2015 and WDI 2015. BLZ=Belize, BRB=Barbados, FJI=Fiji, GUY=Guyana, LCA=Saint Lucia, SLB=Solomon Islands, VCT= Saint-Vincent-And-The-Grenadines.

135. **Resources devoted to the OI remain moderate, suggesting that factors other than population dispersion may be contributing to the relative high costs of service delivery.** The FSM like many other PICs face the challenge of needing to deliver services to a highly disperse population, which may contribute to the high cost of service delivery. However, spending patterns suggest that only a small share of resources are devoted to remote education facilities. More specifically, the overall budget allocated to OI primary and secondary schools, including salaries for teachers, varies from a mere 3 percent in Pohnpei to 15 percent in Yap to 20 percent in Chuuk (10 percent of the aggregate FSM budget). This suggests that other costs such as those embedded in the large share of the education budget allocated to administrative and other state-level programs may also be contributing to the high cost of service delivery in the FSM.

4.4 Education Sector Challenges

136. **Despite the relatively high expenditure, enrolment rates are low, especially at the secondary level, when compared to developing country peers.** In 2013, the FSM's gross enrolment rate stood at 98 percent at the primary level and 69 percent at the secondary level, with an NER of 88 and 59 percent, respectively. In spite of being the highest spender on education as a share of GNI in the group of Pacific Island states, the FSM's primary gross enrolment rate was higher only than Tuvalu, and its NER higher only than Tonga, which spends only 3 percent of its GNI on education. At the secondary level, Fiji and Palau, with the highest NERs in the group, spend significantly less than the FSM, which perform only slightly better than the state with the lowest NER, Vanuatu. Comparison with the small Caribbean states yields similar conclusions, which, with the exception of Guyana, sustain primary and secondary NERs superior to the FSM at less than half the education expenditure as a share of GNI. See annex 4 for more international comparisons.

137. Within the FSM, higher per capita spending does not necessarily translate into higher enrolments. The distribution of per capita expenditure across the four FSM states, when considered in conjunction with performance on basic education outcomes, suggests striking differences between states in how effectively they are able to convert financial resources and education inputs into outcomes (figure 55). Kosrae spends about twice as much as Pohnpei in per capita terms but maintains a comparable NER in primary education and a significantly lower secondary NER. Yap also spends twice as much per capita as Pohnpei while maintaining roughly the same enrolment rates as the latter. Chuuk spends roughly the same in per capita terms as Pohnpei, but net enrolments lag significantly behind other states.



Figure 54. NERs and Per Capita Recurrent

Figure 55. Reasons for Being out of School, Children Ages 5–19 Years, the FSM



Sources: GoFSM 2014; HIES 2013; author's calculations.

Disconnect between state-specific per capita expenditures and education outcomes on the 138. ground reflects the need to review the fiscal allocation formulae. The variation in per capita expenditures across the states may not reflect the true needs or demand for schooling on the ground but rather a centrally determined formula for allocation of resources across the states, which relies on a resource envelope set in the Compact and allocated according to the distribution formula (section 2.2). This results in the smaller states receiving a relatively large share of the resources on a per capita basis. To improve education outcomes and equity in distribution of education resources across the states, the GoFSM may consider a review of various transfer formulae. Overall, the FSM has to decide whether to continue the current arrangement of earmarked education transfers from central to local governments or to transition in the long term to direct school transfers. School funding formulae can be used to determine how to allocate resources directly to schools (see annex 10).⁴¹ Generally, distribution formulae include factors such as population, density, school age population, senior population, geography, dispersion, and existing poverty rates. Other approaches seek to incentivize performance, for example, a portion of funds may be held back and distributed when agreed-upon performance goals are met. A variety of indicators can track performance, including enrolments, primary-to-secondary school transitions, or performance on the early grade reading, math assessments recommended in section 4.5. This not only provides incentive for subnational governments to improve performance and monitoring but also provides an indicator visible to the wider public for scrutiny.

Many children are out of school, possibly due to indirect costs of enrolment, but for most 139. the reasons are not clear. Although the earlier analysis of STRs shows that placement of primary schools aims to bring services close to beneficiaries, many children remain out of school. Among children ages 6–13 years who are out of school, Chuuk has the highest share (72 percent), followed by Pohnpei (20 percent), Yap (5 percent), and then Kosrae (3 percent). Fifty-one percent of out-of-school children ages 6–13 years come from households in the lowest and second lowest consumption quintiles. Figure 55 presents household reports on why children between the ages of 5 and 19 years are not in school. Interestingly, 47 percent of children are not in school due to 'personal reasons'; it is unclear what this means; households are unwilling to divulge what they consider sensitive or private information. Participants in consultations around these data hypothesized that households are unwilling to reveal information about financial hardships or other social circumstances that could hurt their social standing in their respective communities. This large category of unexplained out-of-school children notwithstanding, the data do reveal that even though school is free, indirect and opportunity costs of education are a constraint for a significant fraction of households: for 9 percent of children, schools were reported to be 'too far away', and 17 percent had to 'help at home'. Another 12 percent were reported to leave due to poor academic performance.

⁴¹ The 'first generation' model for such formulae used by many countries implementing school-based management involves a simple capitation (per student) formula, usually weighted by age or grade to capture differential costs from different levels of school education. The 'second generation' formula models seek to address 'vertical equity' through inclusion of weights to reflect the relative scale of disadvantage, sometimes including multiple characteristics (for example, boarding of special needs pupils).



Figure 56. Benefit Incidence of Public Spending on Education in 2013, the FSM

Source: HIES 2013; author's calculations. *Note:* See annex 5 for an explanation of how benefit incidence is measured.

140. Government spending on primary education is slightly regressive and becomes more regressive at the secondary level. Figure 56 presents the benefit incidence of public spending (annex 5) on education at the primary and secondary levels, based on quintiles of population. The spending is slightly regressive at the primary level and becomes more so at the secondary level. This is not surprising, given that private school enrolments are very small and limited to children from the highest consumption quintiles and that most of the children out of school at both the primary and secondary levels are from socioeconomically disadvantaged households. At grades 1–8, children from households in the lowest consumption quintile constituted 14 percent of all enrolled children, 22 percent were from households in the middle consumption quintile, and 22 percent were from households in the top quintile. The situation reverses in secondary school, with children enrolled from the lowest consumption quintile constituted children, compared to 23 percent from the highest.

141. Findings of a partial BIA suggest that public expenditure on tertiary education is highly regressive (Figure 56). A mere 3 percent of students enrolled in public tertiary education institutions come from the lowest consumption quintile households, compared to 80 percent from the two highest quintiles. However, tertiary education in the FSM is not free, and data on fees paid by students were not available at the time of writing. Presumably, the government recoups some of its expenditure through fees. Further, scholarships are offered by the SGs and NG to students from low-income households, and data on this are also not available. Given the disproportionally high representation of the richest in the tertiary student population, it is likely that the incidence of tertiary education subsidy is still quite regressive overall, but the BIA is not complete in the absence of the missing pieces of information.

142. **Enrolments are not translating into strong learning outcomes across the country.** Each year, the national DoE in collaboration with the states' DoE administers the National Minimum Competency Test (NMCT) in math and reading to all the students in grades 4, 6, 8, and 10 (annex 6). In 2013, the year for which the most recent data are available, all private and public schools were included, and 94 percent of all schools in the country participated in the assessment. Results are sobering: nationally, only 34 and 22 percent of children in grade 8 achieved 'minimum competency' or above in reading and math, respectively. Performance across states varied widely. In reading, a mere 17 percent of children were minimally competent or above in Chuuk, compared to 56 percent in Kosrae. In math, performance ranged from 10 percent of children achieving minimum competence or above in

Chuuk to 42 percent of children in Kosrae.⁴² Low learning across the states was confirmed in the baseline Early Grade Learning Assessments conducted in Kosrae and a limited number of schools in Pohnpei, with 80 percent of the grade 5 children sampled in Pohnpei performing at the 'developing' level or lower in English literacy and 52 percent of grade 3 children in Kosrae in numeracy (ADB 2015).

143. Assessment results indicate that children learn little in schools, which may be due to low teacher quality. Teacher quality has two key dimensions, teacher knowledge (what knowledge does the teacher have that he or she can impart to students) and teacher effort (are they doing the best that they can to impart whatever they know). In the FSM, there is room for improvement in both dimensions. One, there is no formal teacher training institute in the country. The COM has a small program on education, which graduated a mere 116 students in 2012–2013. Until recently, there were no minimum qualifications or standards expected for teaching. About 68 percent of teachers in 2014 had an AA/AS and no formal training in pedagogy, and another 16 percent had no formal degree at all. Second, incentives for maximizing teacher effort are missing. While public service jobs are reportedly in high demand, it is not clear how competitive the selection process is for teachers. Also, opportunities for supervision are limited in many schools. The smallest schools are concentrated in the most remote locations, typically the OI, and are in contact with mainland authorities by radio only.

144. The current organization of the education system reflects a supply-driven formulaic approach, lacking provider accountability, and relatedly, incentives for performance. Most of the efficiency and equity analysis in this PER relied on budget data instead of actual spending. This is because beyond certain state-level aggregates, the NG does not require detailed reporting on use of resources or performance. Without such information, it is impossible to hold state education authorities accountable for performance or to perform regular M&E. Further, the limited data that could be used reflect the underlying input-based approach to service delivery, where budgets are allocated on the basis of a centrally determined formula⁴³ and an implicit policy objective of bringing service delivery as close as possible to beneficiaries within a given resource envelope. Finally, at the level of schools, there are no incentives for performance. Schools are financed on the basis of requested budgets, with no consideration for performance or learning in classrooms. Teacher salaries are determined by SGs, with little accountability to the communities they serve. The FSM needs to move away from a supply-driven formulaic approach to operating schools to one focused on supporting and rewarding performance. This is not possible without information made available on time and without providers made accountable for their performance, with rewards and penalties awarded accordingly.

⁴² Before 2013, assessment data are available for 2012 only, and there has been no significant change in outcomes since then. ⁴³ Resources for the education sectors are largely derived through the U.S. CSGs. These grants are shared among the states based on the distribution formula. The distribution formula divides resources based largely on population, with the remainder equally divided among the states, irrespective of size, geography, poverty, and capacity. There are also no performance-based incentives in the current resource allocation model. The distribution formula has been changed several times over the past 2– 3 years. However, changes to resource allocation are not based on changing needs but are centrally and supply driven.

Box 9. How Can Information for Accountability Improve Learning Outcomes?

There are three main accountability channels through which information could affect learning outcomes:

(a) **Increasing choice.** Providing parents with hard evidence about learning outcomes at alternative schools allows parents and students to optimally go to their preferred schools. In a context where there is a choice of schools and where school-level resources are linked to attendance, the information about learning outcomes can have two effects. First, it can reduce the information asymmetry between service providers (who know substantially more about what is going on in the schools) and service users. Second, the enhanced competitive pressure induced by a more effective choice can induce providers to improve quality. Both of these effects increase client power in the provision of services.

(b) **Increasing participation.** By publicizing rights, roles, and responsibilities and by documenting service delivery shortfalls relative to other schools in the village, district, province, or country, information can be a motivator for action on the part of parents and other stakeholders. Lack of information could lead parents and other stakeholders to believe that performance is adequate—in turn leading to complacency. The provision of information can rebalance the relationship between users and providers and spur users to action, including increased or more effective oversight of schools—thereby also increasing client power. The logical chain is that provider effort increases as a result of this intensified oversight, thereby improving education quality.

(c) **Increasing voice.** Providing credible information can allow parents and other stakeholders to lobby governments more effectively for improved policies, either at the local or national level. It provides content to feed the voice that citizens use to pressure governments and hold them to account. Information can expose shortcomings and biases, and its wide dissemination can overcome information asymmetries that perpetuate inequalities (Keefer and Khemani 2005; Majumdar, Mani, and Mukand 2004). Finally, information can become the basis for political competition (Khemani 2007).

Source: Bruns, Filmer, and Patrinos 2011.

145. The anticipated decline in financial resources for education underscores the urgent need to investigate ways to reorganize services to improve value from current investments. Low learning in FSM schools indicates that the country is not reaping the full benefits from its education investments. This, in a context of shrinking resources, renders it critical to look for ways to increase the value gained from each dollar invested. This section has highlighted the key shortcomings of the existing system, where improvements could help the overall efficiency of the system. On the expenditure side, the high allocation to administrative costs across the GoFSM indicates that they should be further scrutinized. The most urgent need, however, is for improvement in learning outcomes across the four states, at all levels of the system. Merely changing spending patterns and allocating resources differently will not help with this. It is imperative that the FSM look at the current model of service delivery and identify ways to reorganize it so that value for resources invested can be improved. The next section has some recommendations to this end.

4.5 Conclusion

146. **This section recommends core action areas that could help strengthen accountability and improve service delivery.** Strengthening accountability and fixing service delivery is a long-term process, which will require deeper sector-specific analysis in the areas of primary, secondary, and tertiary education services. This goes well beyond the scope of this chapter. Instead, this chapter recommends a number of core action areas. In each area, further analytical work will shed light on the costs (direct and indirect) and benefits of proposed strategies. The biggest cost of inaction by far is continued low return to a large investment and opportunity costs of what those resources could have been put to use instead. A decline in resources will likely only have a negative impact on the system's already low quality and outcomes, similar to, for example, the decline in enrolments witnessed in countries undergoing structural economic reforms that affected financing and governance of the education sector in the 1990s.

Knowledge Gaps to Be Filled Urgently

Further sector-specific analysis based on improved data sources should investigate the 147. scope for efficiency improvements through reallocation of resources, starting with the high administrative costs. The low return on education investments highlights the need for closer examination of resource allocation within the sector and how well the input-based financing to states corresponds to actual needs across the states. The smaller states of Yap and Kosrae spent roughly twice as much per capita as Pohnpei, but outcomes are not significantly better than in the latter. All states earmark a large portion of the education budget for administrative and other state-level programs. Ostensibly, such state-administered programs aim to support schools, but little information is publicly available on how these are targeted or their specific activities. Further, given that these budget lines have existed now for quite some time, with little change in allocations, and outcomes have changed little in the meanwhile, there is now an urgent need to unpack and assess the function and usefulness of these programs. Overall, from an efficiency perspective, it is a priority to ascertain whether or how schools benefit from this highly centralized administrative spending and whether there is room to reduce this spending and generate savings for investing elsewhere in the sector while maintaining or improving outcomes.

148. Low performance in national assessments indicates the need to diagnose critical learning needs, followed by teacher training and skill building to improve teacher knowledge and classroom practice. Children cannot learn if a teacher is not effective. Evidence from around the world underscores how exposure to a good teacher can generate lifelong benefits. As a first step, a diagnostic exercise is needed across all states to identify the most critical areas for improvement in teaching and classroom practice. Early grade reading and math assessments generate information on student performance and reveal the specific domains of learning that can be targeted and improved upon through classroom practices. Teacher training and professional development can then focus on these areas.⁴⁴

Core Action Areas for the Medium Term

149. **Further analytical work in the medium term can shed light on how to improve equity (and enrolments) at the primary and secondary levels.** As discussed earlier, the regressivity of public spending reflects the population of out-of-school children who primarily come from the lowest consumption households. Further work is needed to understand what keeps these children out of school and confirm whether indirect and opportunity costs of education pose a significant constraint (i.e. distance to school, need to help at home, poor academic performance). In secondary education, enrolments could be improved through interventions in two areas. First, poor learning at the primary level suggests that very few children will be motivated or able to stay in the system after completing primary school. Thus, improving learning in primary schools should improve retention of students at higher levels. Second, to the extent that secondary schooling is seen as a means to access higher education and better-paid jobs, secondary school enrolments are unlikely to improve unless returns to schooling are perceived to rise. This in turn depends on how well secondary school and higher education learning align with economic opportunities and needs for skills.⁴⁵

⁴⁴ In Pohnpei and Kosrae, a modified version of these assessments has already been implemented under the ADB-supported Quality Primary Education in the North Pacific. The project supported development, piloting, and implementation of an Early Grade Learning Assessment, a survey tool that enables education practitioners to track student progress in literacy and numeracy development and delivered teacher professional development focused on areas in need of improvement. Follow-up of children after one year indicated significant improvements, with a 21 percentage point increase in children assessed to be at the proficient or advanced levels in reading and a similar improvement in numeracy (ADB Quality Primary Education in the North Pacific reports, 2015). Other FSM states may benefit from a similar exercise.

⁴⁵ If the expenditure analysis recommended earlier reveals that there is room for cutting back on centrally incurred NG or SG expenses, the potential savings generated could help improve equity by allowing a diversion of resources to programs targeting

150. To improve the return on its education investments, the FSM must shift its focus from managing financial and other inputs to improving provider accountability and performance. Beyond the closer examination of certain expenditure pockets suggested earlier, efficiency gains in the FSM cannot be realized with a mere reallocation of resources from one part of the sector to another, without fixing the organization of service delivery, and, in particular, its lack of incentives and accountability. Learning outcomes will not improve if schools continue to be financed on the basis of requested budgets, with no consideration for performance or learning in classrooms or with teachers who are accountable more to remote SGs than to the communities they serve.

151. A key step to strengthening accountability is to build school capacity to make and implement key decisions while enhancing school autonomy in the long term. Across the world, countries have adopted varied strategies to strengthen the capacity of schools to plan, manage, and execute activities to improve education outcomes. One approach is school grants, where a predetermined amount of money is awarded competitively, or by other predefined allocation rules, to schools based on the proposals they submit. Capacity-building efforts to strengthen school-level planning and support from central authorities to clearly define roles and responsibilities usually accompany such programs. In Mongolia, for example, a recently launched school grants program aims to promote design and execution of cocurricular activities to improve teaching and learning processes as well as learning outcomes in reading and math and strengthen school-level planning of activities by the school community (teachers, school principals, administrators, students, and school board members) to improve the learning environment of the school. Annex 7 highlights another example from Myanmar. In Tonga, a school grants scheme was very well received, with high satisfaction rates expressed by beneficiaries and reduced inequality in availability of learning materials across schools.⁴⁶

152. Such school-based management can be a powerful tool to improve education outcomes, but its success depends critically on design of the right incentives for performance. Enhanced school-level management and autonomy have to be balanced by providers accountable to school communities who are empowered to voice preferences, needs, and priorities; otherwise, low levels of accountability can constrain effectiveness of autonomy policies (Hanushek et al. 2012). Accountability in turn rests foremost on availability of information on performance that is generated and disseminated regularly. As seen earlier, such information is not available in the FSM. This weakens citizens' power to hold providers accountable and also weakens their voices relative to policy makers and politicians. When information can be successfully used to promote effective choice and competition and enable citizens to participate in school oversight and management, it can lead to improved educational outcomes (Box 9). Subsequent to this, community involvement and ownership of schools require a process or mechanism that allows local education stakeholders to get involved in school decisionmaking processes and management, for example, create school committees that may monitor the school's performance in test scores or teacher and student attendance; appoint, suspend, dismiss, and remove teachers and ensure that teachers' salaries are paid regularly; and approve (albeit rarely) annual budgets, including the development budget, and examine financial statements.

Core Action Areas for the Long Term

153. In the long term, improvements in teaching quality are contingent on creation of a stock of high-quality candidates and teacher management policies that reward and retain only the best. Training to improve teacher skills among existing teachers is a remedial measure that is not efficient in

demand-side constraints found to keep children out of school, especially in Chuuk. Of note are cash transfer programs that have shown promise in many other settings.

⁴⁶ No data on impacts on management at the school level or on learning outcomes were collected.

the long term. The key is to attract the most motivated candidates to the profession. There is growing evidence that, for reasons not fully understood, some people, regardless of training, interest, and good intentions, are simply not effective teachers.⁴⁷ To improve teacher effectiveness, the FSM could consider (a) strengthening the existing education program at the COM to provide preservice teacher training that is mapped to state-specific learning needs; (b) creating incentives for high-ability secondary school candidates to enter the program and the teaching profession; (c) raising the profile of the teaching profession through higher entry requirements; and (d) reforming teacher management policies to retain only the best performing teachers in the long term. Pay-for-performance programs could also be piloted in states with the capacity to administer these programs. In contrast to other incentives for teachers, both contracts without guaranteed tenure and pay-for-performance programs establish direct links between teachers' performance and rewards or sanctions (annex 9).

154. **Further sector work should explore optimal service delivery organization in the FSM, focusing on the special issues of low-STR and low-performance schools.** Students enrolled in remote schools are among the lowest performers in the country. Attendance at school where a child is not likely to add to his or her learning is like not going to a school at all—and given the expense incurred, it becomes important to assess the value add of these schools from the perspective of communities benefiting from them. Even if these children perform poorly on national assessments, are there other local skill needs being met by these schools? Costs could be reduced by exploring alternative strategies for deployment of personnel, such as assigning teachers to teach multiple grades. The broader nationwide efforts to improve teacher quality, described earlier, should also help.⁴⁸

⁴⁷ Research confirms that teacher effectiveness does increase during the first three years of teaching. Contrary to the belief that attrition should be avoided as teachers become more effective with confidence gained over time, there is no evidence that the trend continues after three years. Further, there appear to be no clear methods for transforming ineffective teachers into effective ones, and rapid assessment, coupled with the termination of new teachers early in their careers, may be the most cost-effective strategy for increasing student learning (Yen and Ritter 2009; Bressoux, Kramarz, and Proust 2009; and McKee, Rivkin, Sims 2010).

⁴⁸ The high per capita expenditure on small, remote, difficult-to-supervise schools poses a special challenge. Attracting good teachers to these schools is difficult and supervision opportunities are minimal, and both factors make management to improve quality challenging. Any analysis undertaken on this front should also take into account that efforts to provide expensive, targeted supervision support and TA to improve management of teaching and learning in these difficult-to-reach schools will only increase already large education expenditures.

V. Health Sector Issues

5.1 Structure of the Health System in the FSM

The FSM's health care system is organized into three levels. The three levels in health care 155. are the national, state, and municipal levels. At the national level, the DoH has no direct role in the provision of health care services but is limited to health planning, donor coordination, and technical and training assistance. It also has an implied role in quality assurance and health standards. The DoH services in each state is responsible for running state curative, preventive, and public health services, including the main hospital, peripheral health centers, and primary care centers, generally called dispensaries. Most DoH services have minimal capabilities for planning and programming and have structurally weak management systems. There is a main hospital in each state. For residents who live on the OI, access is difficult because of the lack of public transportation between the islands. Dispensaries typically are located in island municipalities based on population, need, and political considerations. Finally, in the municipalities (including the outlying islands), there are dispensaries similar to health clinics (posts). These dispensaries are part of the state health department, but their dayto-day operations are under the supervision of the mayors in which the dispensaries are located. Services that can be provided at the dispensaries through the health assistants staffed at these dispensaries are mainly diagnosis and treatment of common ailments. The more advanced cases are referred to the state hospitals. All health facilities are publicly funded, but hospitals are mandated to charge fees for some services. Hospitals thus operate mainly on the basis of input-based public financing, but they also recover some costs from insurance plans for services provided to patients covered under insurance.

156. In 2011,⁴⁹ the FSM had a total of 5 hospitals and 117 public health and other facilities. Each of the four states had one public hospital in 2014 (Table 11); Pohnpei was the only state with a second private hospital. Hospitals in the FSM employ doctors, nurses, and other health staff and provide both inpatient and outpatient primary and secondary care. Other health facilities, of which dispensaries form the largest share, do not employ doctors or nurses and provide preventive and promotive care, as well as basic outpatient curative care. Of these, Chuuk, the largest state with roughly half of the country's population, has the largest share (70 facilities). Kosrae, in comparison, with the smallest population (7 percent of the population) operates five aid posts only.

	PNI	СНК	KOS	YAP
Number of nonhospital facilities (2013)	17	70	5	25
Number of public hospitals (2013)	1	1	1	1
Operating beds (2013)	92	125	35	42
Population covered per nonhospital facility (2014)	2,863	702	1,264	408
Expenditure per capita	195	191	360	489
Immunization coverage	63%	36%	85%	85%
Health insurance enrolment or population	35%	31%	41%	14%
Off-island medical referral cost per capita	13.6	13.4	32.4	39.1
Hospital visits or population	1.0	0.6	2.1	4.2
Dispensary and health facility visits or population	2.3	1.6	1.9	4.2

 Table 11. Select Health Sector Indicators, the FSM

Source: World Bank estimate based on data provided through the census, Compact Reports, the GoFSM. *Note:* CHK = Chuuk; PNI = Pohnpei; KOS = Kosrae.

157. Population coverage per nonhospital health facility is low, for less densely populated states, reflecting the desire to place these facilities as close as possible to beneficiaries. Population

⁴⁹ 2011 was the latest year for which these data were available.

covered per nonhospital health facility⁵⁰ in the FSM varies from 480 per facility in Yap to 2,863 in Pohnpei (Table 11). Pohnpei has the same population density as Yap,⁵¹ but overall the population is less dispersed with a smaller fraction resident in the state's OI. To compensate for the high population dispersion, Yap has more nonhospital facilities than Pohnpei, and the population covered per facility is six times higher in Pohnpei than in Yap. Kosrae's entire population is resident on one island only, but the state still has the lowest population density in the country. To compensate for the sparse population, the number of facilities is higher than could be expected on the basis of population alone and also results in high population coverage (1,263 per facility). Chuuk has the highest population density among the four states and roughly half the population of the country—still, the population covered per facility is four times lower than in Pohnpei. Thus, relative to Pohnpei, each of the other three states has a significantly higher density of health service coverage. Overall, the lower the population density of the state, the lower the population coverage per nonhospital health facility, which reflects an attempt to place services as close as possible to beneficiaries.

158. Pohnpei receives a very high proportion of total outpatient visits in the FSM, relative to its share both in the country's population and in the total number of health care facilities. Of the total 357,445 outpatient visits that took place in the FSM during 2014, 50 percent occurred in Pohnpei, even though the state has only 36 percent of the country's population. As seen above, Pohnpei also has the lowest density of health service coverage among the four states. Further, while Yap and Kosrae receive outpatient visits consistent with their population shares (14 and 7 percent, respectively), Chuuk receives significantly less, at only 28 percent of total outpatient visits in the FSM. One possibility is that Pohnpei's resident population tends to use health services a lot more than the other states, on a per capita basis. Limited evidence from the 2013 HIES suggests this might be a partial cause: among those with long-term illness, household members were between 8 and 12 percentage points (in Kosrae and Yap, respectively) likelier to use health services than in the other three states. Another possibility is that Pohnpei receives a higher share of visits from out-of-state residents, but facility-level data are not available to confirm this. Taken by itself, it is hard to determine whether the higher-than-expected use of the Pohnpei state hospital is a good or bad thing: on the one hand, it may lead to congestion and long wait times for patients (no data are available to confirm this). On the other hand, if the high use is due to out-of-state beneficiaries bypassing local health facilities, then this may indicate that the quality of care at Pohnpei state hospital is significantly superior to that in other health facilities in the country.

159. Health care is provided either free or at very little out-of-pocket (OOP) cost, and coverage of health insurance schemes is low. In the FSM, OOP expenditure on health rose slowly from 4.7 percent of total (that is, public and private) expenditure on health care in 2004 to 9.5 percent in 2013 (WHO 2015). While the distribution of OOP expenditure across socioeconomic classes is not known, the overall spending is quite low compared to other countries. Interviews conducted for this PER revealed that central health authorities believe that cost recovery at health facilities, particularly hospitals, is very low. While hospitals have set fees for services, most people either do not pay these fees at all or do not pay the entire amount.⁵² Finally, publicly funded insurance schemes cover a very small fraction of the population. Currently, the Micare and Chuuk health care plans enroll just under a fifth of the FSM's population.⁵³ While the exact share is not known, health insurance enrolment is

⁵⁰ Henceforth, this chapter refers to all facilities other than hospitals as 'nonhospital health facilities'. Among nonhospital health facilities, the differences between the different types of facilities are minimal, as these employ non-physician staff only and no nurses and provide limited curative care.

⁵¹ Chuuk has a population density of 383 people per km², Pohnpei 106, Yap 96, and Kosrae 60 (FSM 2010 Census of Population and Housing, SBOC).

⁵² Health authorities believe that the primary reason underlying low or insufficient payments is a law that mandates that all hospitals treat patients, regardless of their ability to pay.

⁵³ With low OOP payments at health facilities, high coverage among this class of the population could mean that the more socioeconomically advantaged segment of the population is also the one that is making payments into the health system. Information unavailable on contribution rates and share of insurance in health financing.

concentrated among government employees, indicating high coverage among the wealthier in the country. Given the low OOP payments at health facilities, high coverage among this class of the population implies that those better-off in the country are the ones making payments into the health system. Information on contribution rates and other aspects of insurance was not available at the time of writing. Also, data on the share of insurance in health financing were not available.

160. To access tertiary care, state health departments refer patients to hospitals abroad, and until recently, associated costs of treatment were covered by the states. The FSM's health system is beginning to encounter second-generation challenges that extend beyond the concerns of primary and secondary care, which leads to a growing demand for complex services that are not available in the FSM. Such cases are treated with off-island referrals to other countries, including Guam. While data on the total number of off-island referrals were not available at the time of writing, government reports show that off-island referrals constituted 9 percent of public health expenditure in 2014. Interviews conducted for this PER revealed that states are now mandated to cover referral and treatment costs only for patients covered by a health insurance scheme; however, no data are currently available on how effectively this policy is being enforced or on its welfare impacts.

5.2 Expenditure Trends

161. Like education, total spending on health declined between 2010 and 2012 and remained flat thereafter. With CSGs funding the bulk of health sector spending and the planned Compact decrements, it is not surprising that between 2010 and 2014, nominal recurrent expenditure on health hovered between US\$31 and 32 million per year (Figure 57). In real terms, expenditure declined from US\$26.8 million to US\$23.6 million between 2010 and 2012 and then increased to US\$24.2 million in 2014. SG spending patterns in health followed similar trends, given the bulk of the service delivery functions occur at the states (Figure 58).









Source: GoFSM 2014; author's calculations. Note: CHK = Chuuk; PNI = Pohnpei; KOS/KSR = Kosrae.

162. Health expenditures, as a share of recurrent government spending across sectors, are large when compared to the FSM's peers. Between 2010 and 2014, health expenditure constituted between 15 and 17 percent of total recurrent spending by the government. Given the size of the FSM's economy and the country's income level, these expenditures as a share of recurrent government spending across sectors are large compared to its peers

163. Among the small Pacific Islands, the group with some of the lowest GDPs in the world, the FSM is a median spender, spending significantly less than the Marshall Islands (24 percent) and significantly more than Fiji (9 percent). The FSM has a lower GDP and GDP per capita than each of the small Caribbean states; however, as a share of total government spending, the highest spender in the group (St. Lucia) still spends slightly less than the FSM. Trinidad and Tobago has the lowest expenditure on health as a share of total government spending in the group, at 7 percent of total expenditure.



Figure 59. GDP Per Capita and Share of Health to Total Government Expenditure, 2013

Figure 60. Nominal Per Capita Public Expenditure on Health, by FSM States, 2008–2014

Figure 61. Real Per Capita Public Expenditure on Health, by FSM States, 2008–2014



Source: WDI 2015. GoFSM 2014. Author's calculations. *Note:* CHK = Chuuk; PNI = Pohnpei; KOS/KSR = Kosrae.

164. **Most of the expenditure takes place at the states, with per capita expenditure in health varying significantly across states.** SG expenditures combined accounted for between 78 and 80 percent of the total government expenditure on health in recent years (Figure 58). Chuuk absorbs the largest share, followed by Pohnpei, Yap, and Kosrae. Per capita expenditures vary significantly between states, with expenditures in Yap and Kosrae almost twice as high as those in Chuuk and Pohnpei (Figure 60 and Figure 61). In 2014, Yap incurred the highest per capita public expenditure among all states, at US\$466, followed closely by Kosrae (US\$427), with Pohnpei and Chuuk spending almost half as much at US\$208 and US\$207, respectively. Further, Kosrae and Yap have recently experienced significantly larger increases in per capita expenditures in real terms, compared to Pohnpei and Chuuk—between 2012 and 2014, real per capita expenditure rose by 18 and 31 percent in Kosrae and Yap, respectively, by 3 percent in Chuuk, and declined in Pohnpei by 9 percent.

165. A closer look at the composition of per capita expenditures at the SGs does not reveal

much. The amount spent on each category varies considerably from state to state, and the main concern with the data is that at the time of writing of this PER, a large share of the total spending in Yap (37 percent), Kosrae (25 percent), and Pohnpei (34 percent) could not be classified (figure 62).54 In Chuuk, the with the state most complete classification, the personnel expenditure was significantly lower than that in Kosrae and Yap, despite the incomplete data from the latter states. This is surprising given that Chuuk has the second highest density of health care facilities in the country, after Yap. Also notable is Chuuk's relatively low spending on consumables compared to





Source: GoFSM 2014; author's calculations.

Yap and Kosrae, which may reflect the logistical complexity of getting materials and other health equipment to remote health facilities in the latter two states.

166. **However, poor procurement processes contribute to low quality and inefficiencies in spending on pharmaceutical and medical products**. Various reports document issues in the FSM's procurement practices surrounding pharmaceuticals and medical supplies (Office of National Public Auditor 2014, 2015 performance audits). In Pohnpei, between FY2011 and FY2013, purchases worth US\$3.8 million of medical and pharmaceutical supplies could not be tracked or provided with inventory accountability due to the absence of an inventory management system, and deliveries worth another US\$415,000 for FY2012 and FY2013 could not be accounted for. Receipt of quality medicines could not be ensured due to lack of quality assurance mechanisms. In Chuuk, audits reveal that supplies were bought with short shelf life, and supplies worth US\$324,000 were not delivered on time. This lack of procurement accountability leads to increased risk of theft, loss, misuse, abuse, and inefficient spending. Frequent use of emergency orders has increased the cost of buying medicines, particular in Chuuk, where costs were estimated to increase by 76 percent on average. In Pohnpei, over US\$400,000 could have been saved through competitive bidding and US\$379,000 in Chuuk.

⁵⁴ Expenditure classifications by type (for example, personnel) were only available for financing that was reported on in Annual Compact Reports. For total health spending, there are at times large differences between the amounts reported in the Annual Compact Reports and those in the government audit reports. In 2014, these amounted to a total of US\$1,988,295, US\$679,297, and US\$2,637,770 in Yap, Kosrae, and Pohnpei, respectively. This expenditure is thus at the moment unclassifiable.

167. The overall level of health expenditure is linked to resource allocation decisions surrounding the use of grant funds, which finance the bulk of health expenditures in the FSM. As shown in the introduction section, the structure of the amended Compact entailed a series of sector grants with around one-fifth of CSGs used for the health sector. Within this envelope, CSGs are shared across states based on the distribution formula that roughly shares one-third of CSGs equally across the states, with the remainder share based on the population of the states. This results in the smaller states receiving a relatively large share of the resources on a per capita basis, and this is also reflected in the pattern of expenditures observed in this section.

168. Classification categories currently used to report allocation of resources within the sector do not shed light on how resources flow across facilities nor on how well critical functions, for example, prevention, are financed. Breakdown of health expenditures by level of facility was not available for any of the states, so this report attempted to use budget data for 2014 to explore potential breakdowns of the data (Box 10). Budget categories varied significantly across states and do not allow a meaningful comparison across states. Health administration costs vary widely between the states— Yap allocates a mere 3 percent of its budget to this and Pohnpei and Kosrae 16 and 46 percent, respectively, while in Chuuk they cannot be separated from the other budget categories, which is a concern in its own right. Further analytical work using expenditure data is needed to ascertain whether or how health facilities benefit from this centralized administrative spending. Another complication is that budget categories overlap between type of facilities (hospital versus nonhospital facility or clinic) and programs, which can be administered at any of these facilities. Because of this, the estimates presented here for the breakdown by type of facility should be treated with a great deal of caution. Overall, hospitals receive a large allocation in each state, and this is not problematic in and of itself and is to be expected, as the usage of hospitals is high. Further analytical work would be needed to help identify inefficiencies in spending within hospitals and how health care delivered here could be improved. Beyond that, it is impossible with these data to link expenditure patterns with the health outcomes observed. Kosrae has arguably the best health outcomes in the country (lowest infant mortality rate [IMR] and highest immunization rates), and it appears to spend relatively more on preventive health as a share of its total budget. However, in the absence of reliable prevention estimates in the other states, it is hard to draw conclusions about how well the structure of health spending maps to actual needs on the ground.

Box 10. How Are Resources Allocated within the FSM's Health System?

Breakdown of health expenditures by level of facility was not available for any of the states, so this report attempted to use budget data for 2014 to explore potential breakdowns of the data (Table 11). Budget item categories varied significantly across states and do not allow a meaningful comparison across states. Another complication is that budget categories overlap between type of facilities (hospital versus public health facility or clinic) and programs, which can be administered at any of these facilities. Finally, the underlying budget numbers on which these estimates are based add up to a total of US\$28.7 million, whereas the total health expenditure in both 2013 and 2014 was roughly US\$31.2 million. Because of this, the estimates presented here for the breakdown by type of facility should be treated with a great deal of caution.

- In Chuuk, the largest budget category (76 percent of the state's health budget) was 'hospital and management', but it was not clear whether this allocation was for hospitals only or included Chuuk DoH administrative expenditures. The allocation for dispensaries constituted 10 percent of the health budget, while preventive activities were allocated 8 percent. The 'other' category for Chuuk included dental care only (5 percent of budget).
- Kosrae had budget breakdown available for only four categories: Office of the Director and Division of Administrative Services (46 percent), Division of Curative Services (37 percent), and Division of Preventive Services (17 percent). The budget for curative care could not be disaggregated by level of facility (hospitals versus dispensaries).

- Pohnpei allocated 32 percent of its health budget to its public hospital, 7 percent to dispensaries, 16 percent to cover administrative state-level expenses, and 9 percent to disease-specific programs; these included tuberculosis elimination, diabetes, and maternal and child health. The budget for prevention is low, likely because many of these expenditures are covered under disease-specific programs that include preventable infectious diseases, although this needs to be investigated further. A large portion of the budget is allocated for medical supplies and drugs (22 percent); however, this also cannot be disaggregated by level of facility. A final 3 percent was allocated for the community health center.
- State-level administration budget is very low in Yap compared to the other states, at only 3 percent. Twenty-four percent was allocated to the public hospital. Forty-one percent of the expenditure went to three categories, namely health services, medical supplies, and 'primary section', and could not be categorized by level or type of health facility. Another 14 percent went to the state's four community health centers. As with Pohnpei, the budget allocation for prevention is low (2 percent) and is likely covered under another category—for example, disease-specific programs (6 percent). The other (10 percent) includes medical referrals, dental care, and family planning.
- Roughly 20 percent of the FMS's health expenditure takes place at the national level. In 2014, of the US\$6.08 million budgeted for the NG, roughly 4 percent was allocated for health system support and for the Environmental Health Services Unit, but no further breakdown was available for the allocations marked 'Federal DoH programs' and 'U.S. federal health programs', which together accounted for 87 percent of the budget.

	СНК	KOS	PNI	YAP		National
Administration	76	46	16	3	Office of the Secretary	3
Hospital	70	37	32	24	Health System Support	4
Dispensary	10	_	7	—	Environmental Health Services	4
Prevention	8	17	2	2	Gender Development Unit	1
Disease specific		—	9	6	Sport and Youth Unit	1
Other	5		10	10	U.S. Federal Health Programs	81
Large unclassifiable	_	—	22	41	Federal DoH Programs	6
Community health center		_	3	14		

Table 12. Budget Allocations for Health Activities, FSM States and the National Level, 2014 (%)

Source: GoFSM 2014; author's calculations.

Note: Chuuk (CHK): 'Administration' includes hospital and management, and nursing; 'Prevention' includes sanitation and public health (communicable diseases). Kosrae (KOS): 'Administration' includes the Office of the Director and Division of Administrative Services; 'Hospital' includes Division of Curative Services; and 'Prevention' includes Division of Preventive Services. Pohnpei (PNI): the 'other' category includes dental services, on- or off-island medical referrals, building and ground maintenance, and family planning.

169. **A BIA could not be carried out as the needed beneficiary data are not available.** The 2013 HIES did not collect data on health facility utilization that would permit a BIA to be carried out. For example, data needed would include information on use of outpatient and inpatient care for all household members and the type of health facility accessed (that is, public or private and the health facility level). Currently, data on provider use are only collected for household members suffering from long-term (ongoing) illness.

170. **Current patterns of public and private spending on health indicate a financing model that may not be sustainable in the long term.** Overall, public spending on health in the FSM is high relative to peer island states. At the same time, payments into the health system are low, as evidenced by reports of lower-than-mandated, or even zero, OOP payments at health facilities. Contributions into the publicly funded insurance scheme are also low due to low population coverage. These expenditure patterns, in the light of a shrinking resource envelope in coming years, raise grave concerns about the sustainability of the system in the medium to long term. Further analytical work should look at the fee structure at health facilities, its enforcement, pricing of services and premiums under existing publicly funded health insurance schemes and their viability, and welfare implications.

5.3 Health Sector Challenges

171. **Public expenditure on health in the FSM is also relatively high with regard to basic health outcomes financed by these expenditures.** Among the Pacific Islands, the FSM is a low performer on immunization coverage (figure 63). For the diphtheria, pertussis, and tetanus (DPT) vaccine, the coverage rate among children between the ages of 12 and 23 months stands at 81 percent, the third lowest rate in the group, in spite of the fact that the better-performing states are all relatively lower spenders on health as a share of GDP. Tonga, which spends on health significantly less than the FSM as a share of GDP, still has a similar vaccination rate. Each of the small Caribbean states has vaccination rates higher than those in the FSM, at significantly lower health expenditures as a share of GDP—the lowest performer among these (Suriname) has a DPT vaccination rate of 86 percent. On other outcomes as well, the FSM does not perform as well as could be expected given the country's level of spending on health. Among the Pacific Island states, the FSM has the third highest infant mortality after Kiribati and the Marshall Islands (30), the third highest under-5 mortality, and maternal mortality close to the median in the group.



Figure 63. Selected Health Outcomes and Health Expenditures as a Share of GDP, 2013

Source: WDI 2015.

172. Efficiency with regard to ability to convert inputs into outcomes varies considerably across states. The high expenditure on health across the GoFSM and the distribution of per capita expenditure across the SGs, when considered in conjunction with performance on basic health outcomes, suggest striking differences between states in how effectively they convert resources into outputs and outcomes (figure 63). In 2014, despite spending roughly at the same level of per capita as Pohnpei, Chuuk lagged behind in immunization coverage by 30 percentage points and had an IMR twice as high as that in Pohnpei. Yap and Kosrae spent twice as much as Pohnpei in per capita terms,

but immunization rates exceeded that in Pohnpei only by 6 and 8 percentage points, respectively. Kosrae had the same IMR as Pohnpei, while that in Yap was more than twice as high.

173. Given the FSM's geographic dispersal, the state-based delivery systems are considered to be the only feasible way of administering health in the FSM, but there are challenges. Given the geographic dispersal, remote nature, and cultural diversity of many island communities, these state-based systems for health delivery of services have the best chance, in theory, of developing more responsive and effective services to meet the needs of the community. However, most observers of the health system maintain that there is a need for a collaborative approach between the states and the DoH to achieve national standards of health care and reporting. As the states are responsible for providing health services with control over the bulk of health budgetary provisions, the DoH, as the national body for health policy development, has limited capacity to affect state policy and planning frameworks. The partnership between NG and SGs for health services could be improved through strengthened collaboration and cooperation.



Figure 64. Per Capita Government Expenditure on Health, Immunization Rates, and Infant Mortality, FSM, 2014

Source: GoFSM 2014; author's calculations.

174. **Immunization rates are low, particularly in Chuuk.** Given the level of spending, the foundational public health is not sound. The immunization rate among two-year-old children in the country was a mere 73 percent overall in 2014, varying from 46 percent in Chuuk to 85 percent in Kosrae (figure 64). Thus, the goal of universal immunization is not being reached, raising serious public health concerns. While high rates of incomplete immunization suggest the need to scale up existing public health systems and delivery, non-immunization indicates that the system may not be working at all for some people. The principal concern for further research is to investigate whether these trends in non-immunization are merely due to reporting errors from the method of disease surveillance used, or if these speak to deeper systemic shortcomings within the public health system.

175. **Skilled attendance at birth is high, but use of prenatal health services is low.** With nearly 9 out of 10 births occurring in health facilities, skilled attendance at birth is high in the FSM (UNICEF 2012). Women's access to reproductive health services, however, remains relatively low. Data show that few women start antenatal care in the first trimester of their pregnancy. In 2010, around half of pregnant women received 'adequate' antenatal care, and only a third of infants were born to pregnant women who received prenatal care beginning in the first trimester. As with the data on immunization

rates, low access to antenatal care reflects low reach of education and counselling messages and of preventive and promotive health interventions in general.

Box 11. Why Protect and Bolster Investments in Public Health?

In a free market, public health goods like immunization and vector control will be undersupplied by private providers as the true marginal costs of production will not be recouped by providers (Hemenway 1994) due to the existence of positive externalities. In addition, even families who are fully aware of the benefits of immunization may have insufficient incentive to ensure that their children are vaccinated. Government involvement is thus necessary to strengthen household demand and correct market failures. The marginal benefit of an intervention in public health is far greater than the marginal benefit from investment in curative care, and public health interventions improve the efficiency of the health system. Investments in the right public health measures reduce exposure to risk of disease, dramatically improving efficiency and hence the impact of curative health care services. Strong public health systems, by preventing illness, debility, and death, protect communities against the large economic costs associated with controlling disease outbreaks (Gupta and Rani 2004). An absent doctor cannot cure a sick child, but an effective sanitation system protects children on an ongoing basis (Muralidharan et al. 2006). Finally, an investment in public health is an investment in the poor. Poor people suffer more from infectious diseases compared to the rich (Chaudhury, Hammer, and Pokharel 2008; Mahal et al. 2001).

176. Low use of nonhospital facilities, with people preferring to travel long distances to access care at hospitals, suggests low quality and potential inefficiencies in the system. A closer look at the distribution of outpatient visits across hospitals and nonhospital care facilities sheds light on potential underlying inefficiencies in the system. Although Yap has the highest density of nonhospital services in the FSM, only 36 percent of all outpatient visits in the state annually take place in these facilities-the remaining all occur at the state's hospital. This translated into 0.06 visits per nonhospital facility per population covered, annually, compared to 2.8 visits per population covered at the state hospital (Table 13). The share was similar in Kosrae, at 35 percent (0.28 visits per population covered per nonhospital facility versus 2.5 visits at the state hospital). When combined with the fact that these two states are also the highest spenders on health in per capita terms, these numbers point to high inefficiencies in the system: in Yap and Kosrae, users of the health system prefer to bypass relatively close and easier-to-access nonhospital facilities and seek care in hospitals. In Chuuk and Pohnpei, in contrast, roughly 75 percent of outpatient visits occurred in nonhospital facilities. There are two things to note: one, the striking contrast between these states is that they maintain the same share of outpatient visits in nonhospital facilities at almost the same expenditure level in per capita terms, but Pohnpei accomplishes this at a population-to-facility ratio four times higher than that in Chuuk, as seen earlier. Two, hospital use per population covered is significantly higher than use of nonhospital facilities in both states.55

	PNI	СНК	KOS	YAP
No. of nonhospital visits per person (2014)	0.28	0.02	0.28	0.07
No. of hospital visits per person (2014)	1.2	0.5	2.5	2.8
Hospital bed occupancy rate (2013) (%)	62	58	83	59
Average length of hospital stay (days, 2013)	4.6	4.9	5.3	4.8

Table 13. Health Care Facility Utilization

Source: GoFSM 2015.

Note: CHK = Chuuk; PNI = Pohnpei; KOS = Kosrae.

177. Use of inpatient services appears to be lower than the capacity available at hospitals. Bed occupancy rates in public hospitals are also low (Table 13). In 2013, bed occupancy rates varied from 83 percent in Kosrae to 58 percent in Chuuk. Overall, the data point to lower-than-capacity use of

⁵⁵ In Pohnpei, the number of visits at the state hospital per population covered annually is roughly half that in Yap and Kosrae; this is likely due to the existence of a second private hospital, but data on visits at the private hospital were not available to confirm this at the time of writing.

hospital facilities for inpatient care. Data on the one private hospital in Pohnpei were not available. The length of stay did not vary much across the states, standing at roughly five days per inpatient episode. While the numbers point to unused capacity at hospitals, further analytical work looking at the extent of avoidable cause-specific mortality—along with forecasts for trends in inpatient care needs, given the current chronic disease burden—will determine whether hospital capacity indeed exceeds needs.

178. Limited use of nonhospital facilities could be a sign of potential weakness in the referral system or poor quality of service delivery at these facilities. An important feature of any health system is a well-functioning referral system that 'screens' patients for medical conditions, allowing primary health care to be delivered at a lower-level facility and referring more advanced cases to a higher-level facility. If a significant number of people are bypassing lower-level facilities with a high patient load, which might compromise the quality of care provided. Designing an appropriate course of action will require an understanding of the factors explaining why people bypass lower-level facilities, such as weaknesses in the referral system or perceptions of low quality of care or high closure or absenteeism rates. Currently available data do not shed light on why lower-level facilities are bypassed. With regard to health sector outputs, performance could be improved along some measures but is satisfactory according to government reports,⁵⁶ but no information is currently available on patient satisfaction or quality of curative clinical care in the FSM.

179. With the exception of Kosrae, access to improved sanitation remains low in all states. Infectious diseases continue to take a toll in the FSM, and waterborne and food-borne diseases are major causes of hospital admission. Updated data are not available, but between 1990 and 2003, pneumonia, sepsis, and diarrhea were the leading killers of infants. Nearly three-quarters of reported cases of diarrhea involved young children below the age of five in 2011. Many studies have found that poor sanitation and unhygienic personal habits can lead to very high levels of illness (Sanan and Moulik, 2007). In the HIES (2013), the share of households with access to improved sanitation (connection to a septic system or any type of latrine) ranged from 57 percent in Yap to 99 percent in Kosrae. Further, in each state, the poorest households were significantly less likely to have access to improved sanitation. The difference between the lowest and highest consumption households stood at 36 percentage points in Chuuk and 22 percentage points in Pohnpei (in Yap, the same held true but the differences were not statistically significant). Other sanitation efforts such as handwashing and safe water are also important. In addition to latrine provision, campaigns for educating people about toilet use, to ensure that latrines built by the government are, in fact, used by people, have been shown to have important sanitation impacts (Bleakley 2007; Sanan and Moulik 2007).

180. While coverage of public health services is low, chronic illnesses and related risk factors are increasingly prevalent. The FSM's infant and child mortality rates indicate a significant burden of infectious disease, but a large share of adult mortality—67 percent of all deaths (WHO 2011)— stems from NCDs (Table 14).⁵⁷ Outdated surveys report high prevalence of chronic disease but do not allow comparisons across economic class. The FSM's STEPwise Approach to Chronic Disease Risk Factor Surveillance Survey conducted in Pohnpei and Chuuk showed that in 2002 and 2006, respectively, in the adult population ages 25–64 years, the prevalence of obesity was 42.6 percent and 47.3 percent,

⁵⁶ For example, 80 percent of health facilities in Yap are stocked with essential drugs and supplies at least 80 percent of the time, and this rises to 95 percent in Kosrae. Biomedical equipment was reported to be functional at least 80 percent of the year in 81 percent of the health facilities in Yap, rising to 99 percent in Chuuk.

⁵⁷ The mortality estimates for the FSM have a high degree of uncertainty because they are not based on any national NCD mortality data. The estimates are based on a combination of country life tables, cause of death models, regional cause of death patterns, and World Health Organization (WHO) program and Joint United Nations Programme on HIV/AIDS estimates for some major causes of death (not including NCDs). Data on state-specific mortality and burden of disease are not available for the FSM. Data on causes of outpatient and inpatient visits are collected at health facilities; however, these were only partially available through the DoH for some facilities at the time of writing and could not be analyzed.

prevalence of hypertension was 21.2 percent and 15.2 percent, prevalence of diabetes was 32.1 percent and 35.4 percent, and prevalence of elevated blood cholesterol was 46.6 percent and 19.2 percent, respectively.⁵⁸ Further, chronic-disease-related risk factors were at very high levels in Pohnpei and Chuuk in 2006. In Pohnpei, for example, the overall prevalence of current smokers was 31.6 percent, 29.9 percent of those surveyed reported they currently chewed betel nuts, and the overall prevalence of current alcohol drinkers (defined as those who have consumed alcohol in the past 12 months) was 28.7 percent.

Disease Type	Percentage of Total		
Cardiovascular diseases	35		
Communicable, maternal, perinatal, and nutritional conditions	28		
Other NCDs	14		
Cancers	8		
Respiratory diseases	6		
Injuries	5		
Diabetes	4		

Table 14. Proportional Mortality (percentage of total deaths, all ages), FSM, in 2011

Source: World Health Organization 2011 (http://www.who.int/nmh/countries/fsm_en.pdf?ua=1).

Box 12. Strategies to Reduce Exposure to Key NCD-related Risks

The World Bank report 'Live Long and Prosper: Aging in East Asia and Pacific' (2016) documented effective strategies to reduce exposure to key NCD-related risks in East Asia and Pacific, particularly in the areas of smoking, malnutrition, alcohol use, and vaccination.

Intervention on smoking. Control of tobacco use is as outlined in the WHO Framework Convention on Tobacco Control including (a) increased taxes on tobacco products; (b) enforcement of smoke-free workplaces and packaging and labeling of tobacco products with comprehensive health warnings supported by public education; and (c) banning of tobacco advertising, promoting, and sponsorship.

Intervention on malnutrition:

- Promotion of physical activity and dietary quality and efforts to reduce obesity, including (a) introduction of taxes for unhealthy food; (b) provision of subsidies for healthy food; (c) administration of marketing restrictions; and (d) community-based physical activity at schools, workplaces, and so on
- Reduction of population-wide salt consumption through (a) voluntary reduction of salt levels in processed food and (b) food additives and sustained public education to encourage change in food choices
- Reduction of undernutrition and low birth weight through (a) targeted interventions to reduce stunting and wasting in poor populations and (b) multisector interventions such as food fortifications

Intervention in alcohol use. Reduction of population-wide harmful alcohol consumption, including: (a) increased taxes on alcoholic beverages; (b) limited access to retail alcohol; and (c) banning of alcohol advertising, promotion, and sponsorship.

Figure 65 depicts the price of a 20-pack of cigarettes as of September 2014 using data from the draft WHO Report on the Global Tobacco Epidemic. The red portion of each bar represents the portion that is excise tax. The blue portion represents the cost, insurance and freight, profit margins (for example, manufacturer, distributor, and so on), and other taxes (for example, import tax, sales tax, and so on). One way to help control chronic disease risk factors in the FSM may be to strengthen tobacco control by an incremental increase in excise duties, over the medium term: the WHO recommends up to 70 percent of the retail price of cigarettes.

⁵⁸ Estimates based on self-reported data on chronic disease prevalence show a significantly lower incidence of disease. In the 2013 HIES, diabetes and hypertension were the most commonly reported chronic illness—ranging from 10 to 15 percent of adults between the ages of 46–55 years and 66–75 years, respectively for diabetes, 6 to 13 percent for hypertension in the same age groups, and 3 to 8 percent for heart disease. Self-reported prevalence of gout ranged from 2 percent in the 46–55-year age group, to 9 percent in the 66–75-year age group. Nationally, individuals from the highest consumption quintile households were 4 percentage points likelier to report suffering from diabetes. For hypertension, heart disease, and gout, there were no significant differences between the rich and poor in the likelihood of reporting suffering from the disease.

The FSM may also consider an increase in taxation of alcohol products as a way of reducing harmful alcohol consumption, as well as of products high in sugar content, given the high levels of obesity. These taxes will help expand fiscal space to finance interventions needed in other parts of the sector.



Figure 65. Tobacco Excise Tax Rates as % of Retail Price on Most Popular Brands (September 2014)

Source: Secretariat of Pacific Communities, Background Paper to NCD Roadmap Outcomes, Presented at 2015 Pacific Head of Health Meeting. PNG = Papua New Guinea

Note: (a) Used data from the draft 2015 WHO Report on the Global Tobacco Epidemic.

(b) In Fiji, Kiribati, Samoa, and the Solomon Islands, the most popular brand is locally produced.

(c) In the FSM, the Marshall Islands, and Niue, there is only import tax on tobacco.

181. The FSM's health system lacks provider accountability and, relatedly, incentives for performance. As documented earlier, one challenge faced in producing this chapter was the difficulty in obtaining certain types of expenditure data. Beyond certain state-level aggregates, the NG does not require detailed reporting on use of resources or performance, for example, at the facility level. Without this information, it is impossible to hold providers accountable for performance or to perform any kind of regular M&E. Second, at the level of health facilities and providers, there are currently no incentives for performance. Hospitals are financed on the traditional fee-for-service basis, which incentivizes service volume rather than quality. Public health facilities and dispensaries are staffed by health assistants whose salaries are determined by SGs, with little accountability to the communities they serve. The FSM needs to move away from a supply-driven formulaic approach to operating health facilities to one focused on supporting and rewarding performance. This is not possible without information on key performance indicators made available on time and without providers made accountable for their performance, with rewards and penalties awarded accordingly.

182. Existing and emerging health challenges, in the face of shrinking financial resources, underscore the urgent need to investigate ways to reorganize services to improve value from current investments. The changing health care needs and growing demand for increasingly complex care will stress the health system in coming years, which is problematic in the context of shrinking resources. As such, it becomes critical to look for ways to increase the value gained from each dollar invested. This section has highlighted the key shortcomings of the existing system, where improvements could help the overall efficiency of the system. Foremost is the need to fix public health services and bolster preventive and promotive health efforts (primary prevention). Improved primary and secondary prevention, along with improved quality of care at health facilities, will be key to managing the changing health needs in a financially viable way—and to curtail growth in off-island referrals. It is imperative that the FSM look at the current model of service delivery and identify ways to reorganize it so that value for resources invested can be improved. The next section has some recommendations to this end.

5.4 Conclusion

183. This section highlights core actions and avenues to improve the efficiency of spending and sustainability of the health sector. In the context of a declining resource envelope, this chapter shows that public expenditure on health in the FSM is high, but the FSM's public health and mortality outcomes are relatively low. This is indicative of low value and return on public investments, which may be attributable to weak provider accountability and incentives for performance but could be improved on. Strengthening accountability and fixing service delivery are a long-term process that will require deeper sector-specific analysis in the areas of public health and outpatient and inpatient curative services. This goes well beyond the scope of this chapter. Instead, this chapter recommends a number of core action areas for each subsector. In each area, further analytical work will shed light on the costs (direct and indirect) and benefits of proposed strategies.

Knowledge Gaps to Be Filled Urgently

184. **Improved reporting of data is needed to support design and implementation of existing and new policies.** The generation and dissemination of data concerning the health system is a core public health responsibility. Data on health expenditures, budgets, service use, and other operational data will be needed to analyze the welfare impacts of any new policy the department intends to pursue, including consolidation or localization of services. These data are also needed for regular monitoring of the system. For example, data on health spending by type of facility will allow analysis of spending by various levels of the sector. Breakdown of hospital spending data by spending on personnel, consumables, and so on will help inform design of strategies to improve efficiency within hospitals. In addition, reporting on expenditures and budgets should be standardized across states, facilitating identification of drivers of cost, and inform policy making. Other avenues for improvement may also be considered at a later stage.⁵⁹

185. Future analytical work based on improved data should investigate the scope for efficiency and equity improvements through reallocation of resources within the sector or for savings. While the reorganization of services recommended later in this section may help get better value out of current investments, current resource allocation patterns need to be further investigated to see whether there are pockets of expenditure that could be cut back without affecting outcomes or whether there is any scope for reallocations within the system that could improve system efficiency and equity.

186. A review of resource allocation formulae will help resolve any disconnect between statespecific per capita expenditures and actual needs on the ground. As in the education sector, the variation in per capita expenditures across the states does not reflect demand for services on the ground, but rather a centrally determined formula for allocation of resources across the states (chapter 2). To improve health outcomes and equity in distribution of health resources across the states, the GoFSM, , may consider a review of the various transfer formulae. The appropriate mix of health financing modalities, for example, fixed allocation to health facilities depending service volume, capitation, and performance-based payments, depends on local administrative capacity and will require further study. Needless to say, core public health functions such as surveillance and outbreak response should be nationally managed and funded. The ideal financing model will also depend on the organization of service delivery. For example, if delivery of preventive and curative outpatient care is localized, a new

⁵⁹ This may include (a) administration of multipurpose health surveys that collect household-level information on health service utilization, individual-level health status and outcomes, and financing of medical expenditures (the existing HIES questionnaires can be easily modified to accommodate this); (b) information to monitor the quality of services provided in government facilities and not just their coverage; (c) data for studies to analyze the financial viability of existing public insurance schemes; and (d) adequate measures taken to ensure that the quality of data collected is acceptably high and that data are available on time to be useful for policy and decision making.

mechanism would be needed to hold local governments accountable for use of SG transfers.⁶⁰ This could be targeted at basic public health services such as immunization as well as prevention and chronic case management of NCDs at the primary health care level.

Core Action Areas for the Medium and Long Term

187. **Improving provision of public health services remains a priority in the FSM and will in turn improve the efficiency and equity of the health system.** One important step toward increased investment must be raising public awareness and building social participation (Gupta and Rani 2004). Because those for whom disease is prevented may be a less visible constituency than those who are already ill and seeking a cure, population-based public health interventions are too often not undertaken even though they fix market failures, are pro-poor, and are often relatively easy to implement (Hammer, Aiyar, and Samji 2007; see Box 12). The FSM should therefore take action toward maintaining and strengthening public health systems. There is a particularly urgent need to understand the reasons underlying low immunization coverage, improve maternal and child care service delivery, and maintain and protect government expenditures on public health.

188. Localization of preventive and promotive health services may improve quality of public health services, but costs and benefits need careful examination in relation to local capacity in each state. There is a dire need to strengthen preventive and promotive health services at the local level. One possible option is to shift control over these services to local, grassroots-level governance institutions, where they exist. Placing health prevention and promotion staff, including any outreach workers for reproductive and child health, under the direct supervision of local governing authorities will also help increase oversight and strengthen accountability in the health system as a whole. Localizing control over these services could have various benefits, including increasing health workers' accountability and incentives to perform as well as they can on the job and improved stocking of supplies and medicines in local facilities to treat the specific needs of communities. Any design of such a localization program will require careful planning and a strong monitoring system to identify problems, including lack of clarity in responsibilities, and building new capacities. A monitoring system is also needed to observe and rectify other unintended consequences.

Tobacco and alcohol taxation could be a cost-effective measure to help control chronic 189. disease risk factors in the FSM. While the only data available on NCD morbidity and mortality burden are outdated and projections for future trends cannot be conducted, the limited data available clearly indicate that the problem is large enough to warrant preventive action today. Reducing exposure to risk early in life is part of taking a life-course approach to reducing illness and disability at older ages. Box 12 summarizes key cost-effective strategies for reducing population-level exposure to NCD-related risks. Notable among these is tobacco control, which, as outlined in the Framework Convention on Tobacco Control, is the most cost-effective set of strategies for controlling NCDs. Improvements can happen quickly. This is confirmed by the experience of the United States and Western Europe (Cutler, Deaton, and Lleras-Muney 2006). In 2012, the Philippines passed landmark tax legislation that raised excise taxes on cigarettes, indexed the rates to inflation (starting in 2017), allocated a portion of the revenue to compensate tobacco farmers, and earmarked the remainder to finance universal coverage programs. This experience spurred other countries such as Indonesia, Tonga, and Vietnam to develop similar legislation on so-called sin taxes. In the FSM, there is considerable scope to raise revenues and help control chronic disease risk factors through incremental increase in excise duties, including an increase in taxation of tobacco, alcohol, and sugar products as a way of reducing harmful consumption.

⁶⁰ The Plan Nacer and Plan Sumar (Argentina) and Brazil (Family Health Program) are notable examples.

190. Further analytical work should investigate the optimal service delivery arrangements for improving quality of outpatient curative care and NCD case management, including personnel management policies. In interviews conducted for this PER, health authorities indicated plans to strengthen primary curative care to address the growing burden of chronic disease through improved access to doctors, who are currently employed at the four state hospitals only, while all other health facilities are staffed by health assistants. Such a policy move has far-reaching but different consequences depending on the strategy employed. A host of factors affect the relative costs and benefits of each type of arrangements and should be considered in the context of how best to organize overall service delivery.⁶¹ For example, are doctors available and willing to work in rural areas? In a context of patients frequently bypassing lower-level facilities, what type of incentives and management policies will ensure that doctors are not absent at work and that they exert their best effort on the job? In addition, if capable, skilled doctors are in short supply and they prefer to practice in urban areas, is it better to allow beneficiaries to visit them in urban areas or to seek care from less able doctors in the periphery? The trade-offs need to be carefully examined and could be evaluated as part of the broader public sector review.

191. **Improving procurement processes may also contribute to quality and efficiency gains in health spending.** While the issues and their severity vary across the SGs, reform in procurement systems will support full and open competition in bidding processes, strengthen internal control procedures to track and monitor the delivery of pharmaceutical and medical supplies, including penalties for delays, improve planning for procurement of supplies on an annual basis, and improve inventory reporting.⁶² Strengthening these processes may lead to improved outcomes through improving the quality of services.

Quality improvement in care provided at small, remote health facilities will require 192. strengthened accountability to local communities-barring that a consolidation of services at **bigger facilities may be needed.** Small, remote, difficult-to-supervise health facilities pose a special challenge. Attracting good health staff to these facilities is difficult and supervision opportunities are minimal. Both factors make management to improve quality challenging. One way to rationalize the distribution of resources could be a consolidation of the health system that entails a concentration of services at bigger, easier-to-supervise, and more frequently used facilities, reducing the overall number of facilities over time. Barring such a consolidation, efforts to access and provide expensive, targeted supervision support and TA to improve management of low-performing facilities in these difficult-toreach locations will only increase already large health expenditures and are unlikely to affect outcomes. Another option is to continue to staff nonhospital health facilities with health assistants but ones that are not only recruited from the communities they serve but are also directly accountable to them under a localized system, along the lines indicated earlier for public health services. In addition, these assistants can be supported by a corps of rural health doctors who are employed centrally but rotate on a regular basis, visiting remote facilities for limited periods. Consolidation of services has both costs and benefits, and further analytical work is needed to carefully evaluate these for each of the FSM states.63

⁶¹ Another area where we currently know little about is the quality of inpatient care in hospitals. Without facility-level data on expenditures, and no data on quality of inpatient care provided in the four state hospitals and one private hospital, it is not possible to ascertain whether there is any room to improve value for money. Further analytical work could look at accountabilities of hospital managers (to who and for what); incentives for performance (service volume versus quality and patient satisfaction); and degree of autonomy over assets and human resources.

⁶² There are also considerable variations in the unit prices that Pacific countries are paying for pharmaceutical and medical supplies, and there is potential room for savings to help meet increasing health needs (Pacific Heads of Health Meeting: February 2015).

⁶³ Determining the optimal organization of services in the FSM will require further analytical work to analyze usage patterns across locations within states and associated costs and benefits. The potential benefit of consolidation with regard to improvement in the overall level of morbidity is hard to predict because no data are available to quantify the impact of access to treatment on morbidity levels. However, a diversion of resources away from facilities that do not appear to influence health

193. Given the changing health care needs and low payments into the system, the FSM could explore options for more sustainable health financing. As seen earlier, the coverage of the Micare and Chuuk health care plans is low, and OOP payments are also low. To improve the financial viability of the system, a study could be undertaken to explore a cost-sharing mechanism, either through fees or general copayment or raising funds through taxation, which may be more efficient and more equitable. The need for off-island referrals for health services also poses a special concern, given that the states currently bear the risk of covering these services when they are too small to pool adequately. Pooling of risks associated with this type of tertiary care is needed nationally, and the FSM may benefit from entering into an arrangement with other countries to access better deals with international providers of these services. Supranational or regional insurance options to cover these catastrophic expenses could also be considered, such as those under discussion with development partners in Guam and Palau.

outcomes is a logical step forward. Second, data are not available on absenteeism rates among health staff in the FSM, but a potential benefit of strengthening referral institutions is its effect on productivity among health personnel. Consolidated facilities will offer enhanced opportunities for peer monitoring as several staff members at the same level could be expected to monitor each other's attendance. Finally, since people are already bypassing lower-level facilities closer to them to seek care in hospitals further away, the additional welfare cost associated with consolidation of services at higher levels should be considered, particularly for the poor.

VI. Integration with the Long-Term Fiscal Framework

6.1 Review of the Long-Term Fiscal Framework

194. The LTFF is a tool intended to support decrement management for each SG and serves as an action plan for implementation with timelines and specifications for the state-level budget holder. The Compact, as amended, included two provisions that, by design, lead to annual reductions in the real value of the grants made available to the FSM, which is offset by increased amounts to the CTF. The partial inflation adjustment and design shift to an annual decrement was designed to present a more gradual adjustment toward increased self-reliance in the lead up to FY2024. However, some observed that the typical response to the declining real value of CSGs was dominated by incremental cuts that did not result from focused deliberations and thus did not tend to reflect explicit or practical priorities. Therefore, a change is needed in policy approach to 'avoid dilution' of prioritized governmental activities.

195. The LTFF process was designed to address a broad range of fiscal challenges, with a particular focus on expenditures, as revenues are often contingent on exogenous factors. This includes (a) unsustainable growth trends in health and education expenditures, including rapid growth of wages in these sectors; (b) evidence of unmet needs in critical service areas of government, especially in health and education; (c) unsustainable growth in government wage bills, possibly to the detriment of spending on all other expenditure categories; (d) limited progress on broad-based and FSM-wide tax reforms; (e) decline of Compact funding in real terms, by design, due to the combined impact of the partial inflation adjustment and the annual decrement; (f) stagnant or declining economic activity during the early amended Compact period followed by more positive results in the recent few years; (g) states not fully meeting their obligations under the Compact to match contributions to the Infrastructure Maintenance Fund, and the evident need of still greater allocations toward infrastructure maintenance; and (h) the need to constrain expenditures, increase revenues, and/or find subsequent domestic or foreign contributors to increase CTF contributions, to adjust to projected levels of sustainable support after FY2023.

196. **A two-step process ensued:** (a) technical preparation and the design of fully costed fiscal policy options across key revenue and expenditure categories using FY2013 as the baseline and (b) leadership conference to allow for long-term expenditure and revenue policy deliberations and high-level adoption of the state's component of the LTFF.

197. As part of the first step, an analysis of fiscal trajectory and CSG allocations from FY2004 to FY2013 took place to understand the fiscal structure. An overview of fiscal structure highlighted the emerging fiscal gap and the need for policy commitments with regard to both revenues and expenditures to address the impact of fiscal pressures. A technical review by each budget holder (departments, agencies, and special appropriations) across all branches of government and sources of revenue also took place. The targeted level of 20 percent expenditure reduction was presented in priority order for each budget and for the aggregate of Compact and general fund categories. Potential revenue efforts available to close the emerging fiscal gap, including NG and SG revenue reform options, were also considered. Finally, potential consideration of alternative distribution of CSG funding and/or local revenues of the NG to support state-level service delivery—or what has been commonly referred to as potential 'burden-sharing'—was discussed.

198. As part of the second step, findings from the first step were presented at the leadership meetings. The targeted level of fiscal compression through, in the first instance, expenditure cutting was reduced from 20 percent to 18 percent as a result of using modelling estimates inclusive of both Compact sector funds and local revenues. The 18 percent target was also proposed and adopted to be

broken into three tranches of 6 percent each. The initial 6 percent expenditure cut was deemed to be a firm commitment to be binding on the FY2014 budget submission, while the remaining two 6 percent tranches were deemed contingent for possible implementation in FY2017 and FY2020 if the other identified categories of fiscal adjustment through revenue reform and/or structural reform failed to materialize.⁶⁴ A clear commitment was made for revisiting the contingent commitments through a similar process in advance of the FY2017 budget preparation cycle to reflect emerging realities and/or actions on items outside the control of state leadership. The structure of the LTFF is meant to allow for monitoring of the embedded commitments.

Box 13. Long-term Fiscal Framework

In nominal terms, CSGs are expected to remain largely flat with very small upward adjustments expected until FY2023. In real terms, sector grants are expected to decline by around 2 percent per year when taking into account the US\$0.8 million decrement per year and partial inflation adjustment. Between FY2014 and FY2023,



this is equivalent to around 20 percent reduction in real value of CSGs. However, this is partially diluted by the expected moderate increase in general fund revenues. Taking this into account, the reduction in real value of revenues is expected at around 18 percent between FY2014 and FY2023. However, it was not intended that the 18 percent cut would take place immediately in FY2014 but rather in a set of three tranches of 6 percent each in FY2014, FY2017, and FY2020. The intended LTFF provides for some inflation adjustment in the intervening years. Since the Compact provides for partial inflation adjustment, after each initial cut of 6 percent in the first year of each three-yearly cycle, some allowance, up to

2 percent, can be permitted in each of the following two years. Each state was then requested to identify the initial three-year cut of 6 percent, which would be a firm commitment and reflected in the FY2014 budgets submitted to the JEMCO.

To identify the initial three-year cut of 6 percent (using FY2013 as the baseline), two working groups were established, consisting of budget holders and supported by state technical staff, the SBOC, and the Graduate School USA. The working groups were tasked to (a) review and validate budget holder submissions with regard to amount, prioritization, detail, and feasibility; (b) consider negative impact of submissions and rank in order of priority and potential impact; (c) review compared to set priorities across governments; and (d) identify budget areas where reductions in excess of 20 percent may be needed to protect higher priority projects. These deliberations were not detailed in the LTFF reports.

- **Chuuk.** Over 60 percent of the reductions result from the health and education sectors. In the DoE, 56 percent of the FY2014 expenditure reductions result from reduced asset and maintenance of elementary and secondary schools. A further 20 percent is derived from reductions to scholarships with the remainder attributable to reductions in wages and salaries. In the DoH, around 70 percent of the FY2014 reductions result from reduced services at the hospital (two-thirds of which are related to reduced purchase of goods and services and one-third to reduced overtime and travel). A further 15 percent is derived from reductions to dispensary services, with the remainder attributable to reductions in dental and nursing services.
- **Pohnpei.** Around two-thirds of the expenditure reductions stem from the health and education sectors as well as reduced costs at the state legislature. In the DoE, one-fourth of the FY2014 reductions result from reductions to scholarships, with a further 21 percent derived through reductions to food services at schools. The remainder are attributable to reductions in purchase of instruction materials (15 percent),

⁶⁴ Based on LTFF modelling, if a revenue effort is equivalent in budgetary terms to 12 percent of the FY2013 budgeted expenditure baseline (about US\$3.4 million), then balanced budgets could be sustained without requiring additional expenditure cutting above and beyond the initial round of FY2014 planned reductions.

aid to private schools (14 percent), wages and salaries (7 percent), utilities (7 percent), and so on. In the DoH, 85 percent of the FY2014 reductions result from reduced off-island medical referral services, with the remainder attributable to reductions to food services (at the hospital). At the state legislature, proposed reductions stem from reduced travel, consumables, and fixed asset investments.

- Kosrae. Around 72 percent of the reductions stem from the DoH, administration and finance, education, resource economic affairs, and state legislature. In the DoH, almost all of the FY2014 expenditure reductions are associated with reducing staffing and related costs. In the DOFA, expenditure reductions largely reflect reducing PFM projects and activities. In the DoE, reductions were made to asset and maintenance activities as well as administrative and support activities. In the department of resources and economic affairs, community agriculture and fisheries activities were reduced. Finally, at the state legislature, reductions were made to representation and travel funds.
- Yap. Around 63 percent of the reductions stem from the public works, health, and education sectors. Revenue measures (airport fees) under the department of public works and transportation are expected to significantly reduce the need for expenditure reductions, while expenditure reduction is expected to be achieved in operations and maintenance and personnel. In the DoE, FY2014 expenditure reductions result evenly from reduced asset and maintenance, feeding program, and power and utilities for school runs. In the DoH, around 57 percent of the FY2014 reductions result from reduced travel, a further 32 percent from reduced costs associated with medical equipment, and the remainder associated with medical referrals.

While the FSM states completed their LTFFs, the NG did not complete an LTFF. However, a major element of the discussion at the state-level LTFF meetings was the contribution that tax reform and burden sharing could make to assist the states in maintaining services as Compact resources declined. Reflecting the NG's position to not prepare an LTFF, no allocation for CSGs was made for FY2014 with the exception of the continuing operational grants to the COM. The release of Compact resources by the NG freed up an equivalent amount for the states to help offset the decrement.

Source: FSM SG LTFF Final Reports.

6.2 Implementation of the LTFF

199. The LTFF is the first tool of its kind aimed at focusing the attention of the policy makers and budget holders toward a more sustainable fiscal framework. The LTFF in its design and implementation has focused the attention of the stakeholder to the various economic challenges facing the FSM in the medium to long term. The process has also enabled policy makers and various line ministries to begin the dialogue on prioritizing service delivery and efficiency gains. The fiscal framework is also a great tool for policy makers and line ministries to consider the potential implications of any decision making in a holistic manner.

200. While the LTFF aimed for a one-off step reduction in expenditure for the states in FY2014 from FY2013 levels, actual audited data suggest that total expenditure continued to rise. Total nominal expenditure rose by 3.4 percent in FY2014 compared to FY2013, while real GDP declined by 3.4 percent in FY2014. While the states diverged with regard to expenditure growth, no single state saw a non-negligible reduction in recurrent spending. Wages and salaries similarly grew by 3 percent across the same period. Purchase of goods and services grew by 4.6 percent. From a sector perspective, expenditure for health, education, and social affairs grew by 3.2 percent. Tax revenues on the other hand fell by 3.3 percent.



Figure 66. Sources of Funding for State Education, Health, and Social Spending (in millions)

Sources: FSM Audit Reports for Chuuk, Kosrae, Pohnpei, Yap.

201. The LTFF highlights many of the key challenges facing the FSM; however, it is unclear how this translated into a holistic plan. Taking the health and education sectors as an example, the LTFF noted growth in spending in these sectors, while service delivery gaps remain. In response, the reductions in spending noted under the LTFF, across the states, concentrate in these two sectors. However, a wide variety of proposals are made and in the education sector range from reducing maintenance, to reducing food offerings, staffing levels at the schools, and scholarship offerings. It is not clear how these initiatives will reduce existing unmet service delivery gaps or how they fit into a broader or coherent plan for the sector. It is also unclear how far the LTFF has gone with regard to protecting or enhancing priority activities with an impact on human health or public safety while reducing or eliminating lower priority activities, including those popular among some interest groups.

202. Consistency between the LTFF, the 2023 Transition Plan, the SDP, and government decisions would warrant closer attention. The LTFF highlights that growth in government wages has been unsustainable and the SDP stated goals to restructure and rationalize the public sector. On the other hand, the 2023 Transition Plan notes that "although much has been said and written about the over-inflated wage bill...the major issue is that through a decision of Congress salaries have been frozen since 1997...given the increase in the cost of living, this is not providing good incentives to the workforce as real wages have declined." In addition, as recently as 2015, the government approved a cost-of-living adjustment to all public servants at the NG.

203. **Revenue-side reforms that could support the states in avoiding future expenditure rationalization has stagnated.** Tax reforms, including those to introduce more broad-based VATs and strengthen tax administration, were repealed, given divergent views. Other state-level tax reforms considered have also not progressed. The NG has increased revenue sharing of taxes with the states and on an ad hoc basis shared excess revenues. The increased revenue share to the states from taxes is earmarked for building the state's TFs to mitigate future shortfalls while excess revenues shared are earmarked for state-level infrastructure projects. It is therefore unclear how these additional revenues shared with the states fit into the LTFF. Furthermore, the stagnation in revenue reforms affects the ability for the states to avoid future expenditure rationalization.

6.3 Mapping the PER to Challenges Identified in the LTFF

204. This PER reiterates the importance of using the LTFF across all states annually for coherent policy making and makes additional recommendations in some of the key areas of challenges noted in the LTFF and the 2023 Transition Plan. The LTFF process has documented a broad range of fiscal challenges. More broadly, this PER was aimed at informing policy makers on areas of potential efficiency gains in light of declining Compact funding in real terms and supporting the government in building appropriate institutional structures, systems, processes in the lead up to 2023, when resource allocation and management decisions move fully to the GoFSM. This PER also overlaps with many of the key challenges noted in the LTFF and provides some further recommendations as set out below.

- With regard to limited progress on broad-based and FSM-wide tax reforms, this PER highlights that increasing tax effort, even within the existing framework, will support the creation of fiscal space. To this end, strengthening tax administration, improving incentives for the SGs to access unreached tax base, and reviewing the appropriateness of current tax rates are potential avenues to increasing tax effort.
- One challenge noted in the LTFF is the unsustainable growth in government wage bills, possibly to the detriment of spending on all other expenditure categories. Analysis of this PER showed that although the wage bill is not growing as a share of GDP, a large amount of resources is devoted to it while public sector performance remains weak. Strengthened wage bill management through automation of payroll information systems in the near future could support improved oversight and control of the public sector wage bill and reduced unproductive use of public servants' time. In the medium term, the wage bill policy could also be streamlined and better anchored to living standards and required skills to remove any potential misalignment in pay levels.
- Another challenge noted in the LTFF is the growing health and education expenditures and evidence of unmet needs in these sectors. This PER finds that spending in these sectors has been flat in nominal terms and declined in real terms, but high relative to regional and international peers. Despite the relatively high spending, outcomes remain weak. One way to improve return on investment is through improved transparency and accountability, supported by strengthened data collection and capacity at the local level. Improving and tailoring service delivery arrangements in a holistic manner and increasing collaboration between the NG and SGs are also important.
- A further challenge highlighted in the LTFF is stagnant economic activity, which the 2023 Transition Plan aims to address through increasing infrastructure investments, through use of CIG arrears. The PER highlights areas in PIM that could be strengthened to support more efficient infrastructure investments. However, this will also need to be complemented with capacity building at the local level.
- This PER also reiterates the need to continue saving, so that there are adequate sources of financing to meet public service delivery needs and to buttress against inevitable future shocks. To this end, clearly establishing the objectives of the FSM TF together with an adequate governance structure, appropriate investment strategy, disbursement rules, and linkage to the macroeconomic framework will ensure that surpluses are used to achieve the set objectives.

Annex 1. Measures to Improve the Tax System and Increase Revenue

In some cases, revenue can be increased by raising rates within an existing system. However, the ability to generate increased revenue in this manner may be limited. This is particularly likely when an economy is undergoing substantial structural change, traditional tax bases are declining, and the tax system has fundamental weaknesses. Structural problems in the tax system may well be a major factor underlying not only fiscal deficits but also poor growth and employment performance. Consequently, programs of fiscal adjustment are often accompanied by an effort to improve or even restructure the tax system. This annex focuses on questions relating to tax policy design during a reform period. It must be emphasized, however, that improvements in tax policy are more likely to be successful when they are accompanied by measures to strengthen tax administration.

Characteristics of a Desirable Tax System

The characteristics of a desirable tax system outlined in this section represent a blend of both macroeconomic and microeconomic considerations. In the former case, a tax system's responsiveness to GDP growth and its revenue-generating capacity are paramount. However, because overall economic growth may be affected by the microeconomic allocative effects of a tax system and the post-tax distribution of income and wealth, the system's efficiency and transparency, for example, are also critical.

Revenue-generating capacity. A central objective of the tax system is to raise revenue to finance government spending, without resort to inflationary financing. This suggests the importance of a tax system that can generate revenue increases—at least in line with the growth in nominal income—without frequent changes in tax rates or introduction of new taxes. In this regard, reliance on specific (quantity-based) taxes in times of inflation or on tax bases that are shrinking in relation to the rest of the economy should be avoided because they contribute to low tax responsiveness (or elasticity).

Efficiency. Taxes influence relative prices in the economy and, therefore, have an impact on the pattern of production, consumption, and income. A desirable tax from the point of view of efficiency is one that minimizes its impact on relative prices, thus leaving the allocation of resources essentially undisturbed. Too heavy a tax on a particular commodity will tend to reduce its production and consumption and may, therefore, result in a loss of efficiency if scarce resources are diverted from their most productive use, in turn compromising growth. In practice, efficiency is achieved by levying taxes on as broad a tax base as possible and at fairly low and uniform rates. This also implies keeping tax exemptions to a minimum.

Equity. Taxes should be levied in a fair and equitable manner. The decision on what distribution of the tax burden is fair and equitable is something for each country to decide for itself, preferably through a democratic process. A distinction may be drawn between vertical and horizontal equity. The former refers to differentiation of the tax burden according to ability to pay (as measured by income, wealth, or consumption), while the latter refers to equal treatment of those in similar economic circumstances. Certain types of taxation may affect income distribution, for example, a progressive income tax or an excise on luxuries. However, expenditure policy is likely to be a more efficient instrument than taxation for influencing income distribution, through transfers and expenditures on social services and targeted social assistance programs.

Transparency. Tax codes should be clearly drafted, well defined, and easily understood by the taxpaying community. For private investment, it is especially important to have tax rates that are both stable and predictable. Once tax laws that can generate buoyant revenue growth are established, it is preferable to minimize the frequency of discretionary modifications to these laws. If changes are planned over a reform period, taxpayers should ideally know in advance the tax implications of their production and consumption decisions. A simple, transparent tax system is also relatively easy to administer and promotes compliance.

Reasonable overall tax burden. There are constraints on how much a government can raise in taxes. Even if all the above criteria are met, too high a tax burden will undermine the system's effectiveness by encouraging tax evasion and distorting the structure of relative prices in the economy. One measure of the tax burden is the ratio of tax revenue to GDP, a ratio which varies widely among countries. An 'acceptable' level of this ratio will be determined to some extent by public choices concerning the level of government expenditure or by other factors such as the need to service a large public debt.

Design of Major Taxes

Drawing on the above criteria, the following design features for major taxes are often recommended:

- VAT. This should be a broad-based tax on final domestic consumption that does not tax intermediate consumption (thereby minimizing cumulative taxation as goods move through successive stages of production and distribution) or exports and one that does not differentiate by source of production (foreign or domestic). Because of its efficiency and revenue security, the ideal instrument to achieve this objective is a VAT at a single rate, with crediting provisions and zero rating of exports.
- **Excises.** A selected number of excises can be introduced to discourage consumption of particular items (for example, alcohol and tobacco); link tax payments to the existence of negative externalities (for example, a gasoline tax as a means of pollution abatement); or tax certain luxury goods. Excises should be levied equally on domestic production and imports and, particularly, in an inflationary environment, on an ad valorem basis.
- **Customs duties.** If a moderate level of protection is thought desirable to encourage local industry, a low uniform customs duty, when properly coordinated with a VAT and excises, is the preferred instrument. Duty drawback or suspension schemes are needed to relieve exporters of the anti-export bias caused by customs duties on inputs. To the extent that such schemes are difficult to administer, particular importance is attached to maintaining a low tariff rate. Exemptions from customs duties should be limited and clearly defined to avoid abuse. A low across-the-board tariff may also be justified for revenue reasons in countries where other (and preferable) taxes may prove difficult to administer.
- **Export taxes.** Such taxes should generally be avoided, because they tend to cause an outflow of resources in the export sector toward less efficient uses, thus compromising growth objectives. However, they can sometimes be used on a limited basis to reach hard-to-tax activities (common in the agriculture sector) as a temporary substitute for income taxation and to absorb one-time gains, for example, from a devaluation or from exceptional movements in world commodity prices.
- **Profit taxes.** A tax on profits should ideally be levied at a single rate comparable to the top marginal rate of personal income tax. This minimizes the likelihood of tax-induced shifts between personal income, partnerships, and corporations. Deductions, allowances, and credits are best applied neutrally across sectors and assets to foster efficiency. Tax incentives (such as investment allowances and, particularly, tax holidays), if used at all, should be strictly limited with regard to coverage and duration. A minimum profits tax based on gross assets may be used in some circumstances to promote compliance and equity.

• **Income taxes.** A basic personal income exemption should be set high enough to exclude the very poor and sufficient progressivity can be achieved with only a few income tax brackets. Tax brackets should be adjusted periodically in situations of high inflation to avoid the tendency for 'bracket creep' and supply-side considerations argue for keeping rates as low as possible. Ideally, income taxes should be levied on a globalized income tax base (including all forms of income). However, it is often administratively necessary to establish schedular taxes on different sources of income. Final withholding taxes for wage (and possibly interest and dividend) income have proven successful in curtailing revenue leakage.

Tax Administration

Improvements in tax policy are more likely to be successful when they are accompanied by measures to strengthen tax administration. The essential elements required for successful tax administration reform include an explicit and sustained political commitment; a team of capable officials dedicated to tax administration reform; a well-defined and appropriate reform strategy; relevant training for staff; additional resources for the tax administration or, at least, some reallocation of resources; and changes in incentives for both taxpayers and tax administrators.

Tax administration reform must strive to enhance both its effectiveness and efficiency. Interventions to improve effectiveness include promotion of taxpayer self-assessment, provision of taxpayer education, adoption of procedures for minimizing the cost of compliance, implementation of systems for tax returns processing and accounting that quickly detect noncompliance and take appropriate actions, and establishment of an audit plan to detect violations as efficiently as possible. Also needed are adequate penalties for violations that strike at the heart of the tax system, such as failure to file returns and to pay taxes on time.

Along with a strategy for enhancing effectiveness, tax administrations can adopt a number of measures to focus their scarce resources in the most efficient manner for revenue collection and enforcement. These measures include establishment of a large taxpayers' unit; adoption of a threshold for tax registration that exempts small enterprises from major taxes; the imposition of an alternative tax on small enterprises with limited revenue potential; use of final withholding of taxes on individual taxes; and use of banks for receiving tax payments.

The above measures for improving the effectiveness and efficiency of tax administration suggest an organization of the tax administration to support five principal functions: taxpayer education; registration, accounting, and returns processing; collection enforcement; auditing; and legal services and appeals.

Major reforms in tax design and administration take time to implement. New legislation is often required and basic systems and procedures frequently need modification. In addition, reform may lead to changes in the relative tax burden of different groups and economic sectors. Short-term revenue requirements must also be addressed during the reform process. In developing short-term tax policy packages, particular consideration needs to be given to the revenue productivity of proposed measures, their administrative feasibility, and their likely consistency with the desired direction of more fundamental tax reform. On the basis of such criteria, the most promising short-term measures may emphasize increases in the rates of indirect taxes (particularly broad-based sales taxes and excises) and expansion of the tax base by eliminating exemptions.

Annex 2. Review of Fiscal Federalism and Lessons from International Practices

A federal system is concerned with combining the political and economic advantages of unity while preserving the valued identity of subnational units. The federal system was created with the intention of combining the different advantages that result from the magnitude and littleness of nations (Tocqueville 1990). The political advantage of unity is security, while the economic advantages of unity are those that result from operating within a common market. In addition, centralized provision of services (that can be provided less expensively on a larger scale or their benefits may spill over to districts) creates economies of scale and captures externalities. However, this is at the cost of imposing a common policy on populations with varied preferences and priorities. On the other hand, political advantages of subnational flexibility are that it fosters greater responsiveness of policy makers to the will of the citizenry and results in a closer congruence between public preference and public policy. Economic advantages of localizing service delivery are allocative and technical efficiency. Smoke et al. (1994) argued that under this model, allocative efficiency could be achieved as local preferences could be more closely met. In addition, under local people's scrutiny, technical efficiency of local public goods and services could also be maximized (Wolman 1990). The trade-off between autonomy and efficiency forms the basis of the federal approach to governance. For federations, the complementary roles of the different tiers of government should in turn be determined by analyzing the most effective ways and means of achieving desired objectives.

Federalism is concerned with making continuous adjustments over the continuum and exploring the respective roles of different levels of the government and assigning responsibilities and fiscal instruments to the proper level of the government. For federations, with constitutionally structured dispersion of power, federalism should not be viewed as a fixed allocation of spheres of central and provincial autonomy or a particular set of distribution of authority between governments. It rather is a process, structured by a set of institutions and endogenous factors, through which authority is distributed and redistributed in light of changing conditions (Sharma 2005). In turn, the key dimensions of authority that are often distributed or decentralized are political, administrative, and fiscal. Fiscal federalism refers to the public finance dimension of intergovernmental relations. It specifically addresses the reform of the system of expenditure functions and revenue source transfers from various tiers of government to meet imbalances.

Traditional theory on fiscal federalism contends that the central government should have the basic responsibility for macroeconomic stabilization and income redistribution in the form of assistance to the poor. Musgrave (1959) and Oates (1972) lay out a general normative framework for the assignment of functions to different levels of government and the appropriate fiscal instruments for carrying out these functions. The argument for central responsibility for stabilization and redistribution stems from some fundamental constraints on lower level governments. In the absence of monetary and exchange-rate prerogatives and with highly open economies that cannot contain much of the expansionary impact of fiscal stimuli, the local governments simply have very limited means for traditional macroeconomic control of their economies. Similarly, the mobility of economic units can seriously constrain attempts to redistribute income. An aggressive local program for the support of low-income households, for example, is likely to induce an influx of the poor and encourage an exodus of those with higher income who must bear the tax burden. In addition to these functions, the central government should provide certain 'national' public goods (like national defense) that provide services to the entire population of the country and/or have potential spillover or economies of scale benefits.

The local governments should be responsible for the provision of goods and services whose consumption is limited primarily to their own jurisdictions and the allocation of resources to provide these services. By tailoring outputs of such goods and services to the particular preferences and circumstances of their constituencies, localized provision increases economic welfare above that,
which results from the more uniform levels of such services that are likely under national provision. The basic point here is simply that the efficient level of output of a 'local' public good is likely to vary across jurisdictions as a result of both differences in preferences and cost differentials. To maximize overall social welfare thus requires that local outputs vary accordingly. Traditional theory however does not offer a precise delineation of the specific goods and services to be provided at each level of government. The SGs should be provided with adequate resources for localized service delivery responsibilities.

The choice of a system of governance involves other values as well, including political objectives, and the system needs to be designed with the right incentive and accountability mechanism. The approach of Inman and Rubinfeld (1997) incorporates explicitly certain political goals and examining trade-offs between such goals and economic efficiency. In addition, the design of a federal system also needs a set of formal and informal institutions that embodies the right type of incentives for public decision makers (Olson 1990). These rules or procedures must make the costs of public programs as fully visible as their benefits in ways that make public officials accountable for their decisions (Shah 1998). Various studies have found that fiscal federalism may lead to allocative inefficiencies as well as poor accountability and governance if expenditure and revenue mobilization functions are not property assigned across different levels of government (Hommes 1995; Fukasaku and de Mello 1999; World Bank 1999).

While many studies on this topic tilt in favor of more localization, partly due to its ability to avoid noted inefficiencies of centralized decision making, more recent literature suggests that a strong center is also needed for this to succeed. According to Blanchard and Shleifer (2000), a weak center is prone to manipulation by strong coalitions and interest groups. There are strong arguments that most of the problems with more localization can be solved by central government interventions and regulatory powers, for example, China's success due to a strong center, to withstand the disparaging behavior of local interests and unhealthy local demands. Strong administrative control of the local government by central authorities is in fact important for an efficient federal system. Central governments need to be willing to resist unhealthy demands from the lower levels of government. Riker (1964) suggests that centralization does matter for federalism to be effective.

The challenge in the new paradigm is to devise an appropriately structured system that mandates and provides incentives for responsible local government fiscal behavior and enables the creation of a climate conducive to development. To this end, the center should assume a more sophisticated style of stewardship and be responsible for constructing such support structures, processes, and national institutions that create an enabling environment and provide appropriate incentives for the SGs to behave responsibly. It is also critical to develop the skills of local government employees to meet the requirements of the systems and the abilities of central government officials to assist local governments in the process of their evolution to greater autonomy.

Summarized below is a review of international practices yields a set of practices to avoid and a set of practices to emulate.

Types of transfers to avoid

- (a) Grants with vaguely specified objectives.
- (b) General revenue-sharing programs with multiple factors that work at cross purposes and undermine accountability and do not advance fiscal efficiency or fiscal equity objectives. Tax decentralization or tax-base sharing offers better alternatives to a general revenue-sharing program, as they enhance accountability while preserving state autonomy.
- (c) Grants to finance state deficits, which create incentives for running higher deficits in future.

- (d) Unconditional grants that include incentives for fiscal effort. Improving service delivery while lowering tax costs should be public sector objectives.
- (e) Input-based (or process-based) or ad hoc conditional grant programs, which undermine local autonomy, flexibility, fiscal efficiency, and fiscal equity objectives.
- (f) Capital grants without assurance of funds for future upkeep, which have the potential to create white elephants.
- (g) Negotiated or discretionary grants in a federal system, which may create dissention and disunity.
- (h) One-size-fits-all grants to local governments, which create huge inequities.
- (i) Grants that involve abrupt changes in the total pool and its allocation.

Principles to adopt

- (a) Keep it simple. In the design of fiscal transfers, rough justice may be better than full justice, if it achieves wider acceptability and sustainability.
- (b) Focus on a single objective in a grant program and make the design consistent with that objective. Setting multiple objectives in a single grant program runs the risk of failing to achieve any of them.
- (c) Introduce ceilings linked with macro indicators and floors, to ensure stability and predictability in grant funds.
- (d) Introduce sunset clauses. It is desirable to have the grant program reviewed periodically—say, every five years—and renewed (if appropriate). In the intervening years, no changes to the program should be made, to provide certainty in budgetary programming for all governments.
- (e) Equalize per capita fiscal capacity to a specified standard to achieve fiscal equalization. Such a standard will determine the total pool and allocations among recipient units.⁶⁵
- (f) In specific-purpose grant programs, impose conditionality on outputs or standards of access and quality of services rather than on inputs and processes. This allows grantors to achieve their objectives without undermining local choices on how best to deliver such services. Most countries need to establish national minimum standards of basic services across the nation to strengthen the internal common market and economic union.
- (g) Recognize population size class, area served, and the urban or rural nature of services in making grants to local governments. Establish separate formula allocations for each type of municipal or local government.
- (h) Establish grandfathering provisions that ensure that all recipient governments receive at least what they received as general-purpose transfers in the pre-reform period. Over time, as the economy grows, such a provision will not delay the phase-in of the full package of reforms.
- (i) Make sure that all stakeholders are heard and that an appropriate political compact on equalization principles and the standard of equalization is struck. Politics must be internalized

⁶⁵ Calculations required for fiscal capacity equalization using a representative tax system for major tax bases are doable for most countries. In contrast, expenditure need equalization requires difficult and complex analysis, inviting much controversy and debate; as desirable as it is, it may not therefore be worth doing. In view of this practical difficulty, it would be best to deal with fiscal need equalization through output-based sectoral grants that also enhance results-based accountability. A national consensus on the standard of equalization is critically important for the sustainability of any equalization program. The equalization program must not be looked at in isolation from the broader fiscal system, especially conditional transfers. The equalization program must have a sunset clause and provision for formal review and renewal. For local fiscal equalization, one size does not fit all.

in these institutional arrangements. Arm's-length institutions, such as independent grant commissions, are not helpful, as they do not allow for political input and therefore tend to opt for complex and nontransparent solutions.

Moving from a public sector governance culture of dividing the spoils to an environment that enables responsive, responsible, equitable, and accountable governance is critical. Doing so requires exploring all feasible tax decentralization options, instituting output-based operating and capital fiscal transfers, establishing a formal fiscal equalization program with an explicit standard of equalization, and ensuring responsible access to borrowing.

Source: World Bank. 2006. "A Practitioner's Guide to Intergovernmental Fiscal Transfers." Working Paper WPS4039, World Bank, Washington, DC.

Annex 3. Achieving Results-Based Accountability through Performance-Oriented Transfers

Economic rationales for output-based grants (used interchangeably with performance-oriented transfers) stem from the emphasis on contract-based management under the new public management framework and strengthening demand for good governance by lowering the transactions costs for citizens in obtaining public services under the new institutional economics approach. The new public management framework seeks to strengthen accountability for results by changing the management paradigm in the public sector from permanent appointments to contractual appointment and continuation of employment subject to fulfilment of service delivery contracts. It seeks to create a competitive service delivery environment by making financing available on similar conditions to all providers—government and nongovernment.

The new institutional economics approach argues that dysfunctional governance in the public sector results from opportunistic behavior by public officials, as citizens are either not empowered to hold public officials accountable for their noncompliance with their mandates and/or for corrupt acts or face high transactions costs in doing so. In this framework, citizens are treated as the principals and public officials the agents. The principals have bounded rationality—they act rationally based on the incomplete information they have. Acquiring and processing information about public sector operations is costly. Agents (public officials) are better informed than principals. Their self-interest motivates them to withhold information from the public domain, as releasing such information helps principals hold them accountable. This asymmetry of information allows agents to indulge in opportunistic behavior, which goes unchecked due to high transactions costs faced by the principals and a lack of or inadequacy of countervailing institutions to enforce accountable governance. Results-based accountability through output-based grants empowers citizens by increasing their information base and lowering their transactions costs in demanding action.

Output-based transfers link grant finance with service delivery performance. These transfers place conditions on the results to be achieved while providing full flexibility in the design of programs and associated spending levels to achieve those objectives. Such transfers help restore recipients' focus on the results-based chain (Figure 3.1) and the alternate service delivery framework (competitive framework for public service delivery) to achieve those results. To achieve grant objectives, a public manager in the recipient government will examine the results-based chain to determine whether or not program activities are expected to yield the desired results. To do so, he or she needs to monitor program activities and inputs, including intermediate inputs (resources used to produce outputs), outputs (quantity and quality of public goods and services produced and access to such goods and services), outcomes (intermediate- to long-run consequences for consumers or taxpayers of public service provision or progress in achieving program objectives), impact (program goals or very long-term consequences of public service provision), and reach (people who benefit from or are hurt by a program). Such a managerial focus reinforces joint ownership and accountability of the principal and the agent in achieving shared goals by highlighting terms of mutual trust. Thus internal and external reporting shifts from the traditional focus on inputs to a focus on outputs, reach, and outcomes-in particular, outputs that lead to results. Flexibility in project definition and implementation is achieved by shifting emphasis from strict monitoring of inputs to monitoring performance results and their measurements. Tracking progress toward expected results is done through indicators, which are negotiated between the provider and the financing agency. This joint goal setting and reporting helps ensure client satisfaction on an ongoing basis while building partnership and ownership into projects (Shah 2005b).

Program — Inputs — Intermediate Outputs — Outcomes — Impact — Reach Objectives Inputs						
Improve quantity, quality, and access to education services	Educational spending by age, sex, urban/rural; spending by grade level, teachers, staff, facilities, tools, books, regulations	Enrollments, student- teacher ratio, class size	Achievement scores, graduation rates, drop- out rates	Literacy rates, supply of skilled professio nals	Informed citizenry, civic engagement, enhanced international competitive ness	Winners and losers from government programs

Figure 3.1. Example of Results Chain with an Application to Education Services

Output-based grants must have conditions on outputs as opposed to outcomes, as outcomes are subject to influence by factors beyond the control of a public manager. Public managers should be held accountable only for factors under their control. Outcome-based conditions diffuse enforcement of accountability for results. Because the grant conditions are concerned with service delivery performance in quality of output and access, the manager is free to choose the program and inputs to deliver results. To achieve those results, he or she faces positive incentives by grant conditions that encourage alternate service delivery mechanisms by contracting out, outsourcing, or simply encouraging competition among government and nongovernment providers. This can be done by establishing a level playing field through at par financing, by offering franchises through competitive bidding or by providing rewards for performance through benchmarking or yardstick competition. Such an incentive environment is expected to yield a management paradigm that emphasizes results-based accountability to clients with the following common elements:

- Contracts or work program agreements based on prespecified outputs and performance targets and budgetary allocations
- Replacement of lifelong rotating employment with contractual appointments with task specialization
- Managerial flexibility but accountability for results
- Redefinition of the public sector role as a purchaser but not necessarily a provider of public services
- Adoption of the subsidiarity principle—that is, public sector decisions made at the level of government closest to the people, unless a convincing case can be made not to do so
- Incentives for cost efficiency
- Incentives for transparency and competitive service provision
- Accountability to taxpayers

Under such an accountable governance framework, grant-financed budget allocations support contracts and work program agreements, which are based on prespecified outputs and performance targets. The grant recipient's flexibility in input selection—including hiring and firing of personnel and implementation of programs—is fully respected, but there is strict accountability for achieving results. The incentive and accountability regime created by output-based transfers is expected to create responsive, responsible, and accountable governance without undermining local autonomy. In contrast,

traditional conditional grants with input conditionality undermine local autonomy and budgetary flexibility while reinforcing a culture of opportunism and rent seeking.

Feature	Traditional grant	Output-based grant
Grant objectives	Spending levels	Quality and access to public
		services
Grant design and administration	Complex	Simple and transparent
Eligibility	Recipient government	Recipient government provides
	departments/agencies	funds to all government and
		nongovernment providers
Conditions	Expenditures on authorized	Outputs -service delivery results
	functions and objects	
Allocation criteria	Program or project proposals	Demographic data on potential
	approvals with expenditure	clients
	details	
Compliance verification	Higher level inspections and	Client feedback and redress,
	audits	comparison of baseline and
		postgrant data on quality and
D 1/		access
Penalties	Audit observations on financial	Public censure, competitive
	compliance	for elients
Managarial flavibility	Little on none. No teleron se for	Absolute Dewords for risks but
Managerial nexionity	risk and no accountability for	Absolute. Rewards for fisks but
	failure	penanties for persistent faiture.
Local government autonomy and	Little	Absolute
budgetary flevibility	Little	Ausolute
Transparency	T ittle	Absolute
Focus	Internal	External competition innovation
10000		and henchmarking
Accountability	Hierarchical to higher-level	Results-based bottom-up client-
	government, controls on inputs	driven
	and process with little or no	
	concern for results	
		1

 Table 3.2. Features of Traditional and Output-Based Conditional Grants

Output-based grants create incentive regimes that promote a results-based accountability culture. Consider the case in which the NG aims to improve access to education by the poor and to enhance the quality of such education. A common approach is to provide grants to government schools through conditional grants. These grants specify the type of expenditures eligible for grant financing (books, computers, teacher aids, and so on) as well as financial reporting and audit requirements. Such input conditionality undermines budgetary autonomy and flexibility without providing any assurance about the achievement of results. Moreover, in practice it is difficult to enforce, as there may be significant opportunities for fungibility of funds. Experience has shown that there is no one-to-one link between increases in public spending and improvements in service delivery performance (Huther, Roberts, and Shah 1997).

Output-based design of such grants can help achieve accountability for results. Under this approach, the NG allocates funds to local governments based on the size of the school-age population. Local governments in turn pass these funds on to both government and nongovernment providers based on school enrolments. Nongovernment providers are eligible to receive grant funds if they admit students based on merit and provide a tuition subsidy to students whose parents cannot afford the tuition. All providers are expected to improve or at the minimum maintain baseline achievement scores on standardized tests, increase graduation rates, and reduce dropout rates. Failure to do so will invite public censure and in the extreme case cause grant funds to be discontinued. In the meantime, reputation risks

associated with poor performance may reduce enrolments, thereby reducing the grant funds received. Schools have full autonomy in the use of grant funds and are able to retain unused funds.

This kind of grant financing will create an incentive environment for both government and nongovernment schools to compete and excel to retain students and establish reputations for quality education, as parental choice determines grant financing to each school. Such an environment is particularly important for government schools, where staff have lifelong appointments and financing is ensured regardless of performance. Budgetary flexibility and retention of savings will encourage innovation to deliver quality education. Output-based grants thus preserve autonomy, encourage competition and innovation, and bring strict accountability for results to residents. This accountability regime is self-enforcing through consumer (parental choice in the current example) choice.

Source: World Bank. 2006. "A Practitioner's Guide to Intergovernmental Fiscal Transfers." Working Paper WPS4039, World Bank, Washington, DC.



Annex 4. Enrolment Rates and Education Expenditures as a Percentage of GNI in 2013

Note: In each figure in this panel, the FSM has two data points—FSM and FSM2. Both points use the same value for the respective y-axis variable in each plot, but the x-coordinate (education expenditure as % of GNI) is different. For the data point 'FSM', the x-coordinate is the value from WDI (2015), which is 24 percent. For the data point 'FSM2', the x-coordinate is the value calculated by authors using total nominal recurrent education expenditure for FSM in 2013 (US\$39.2 million) divided by the GNI reported in WDI in 2015 (US\$342.1 million), equals 11 percent. An explanation for the difference between the two values was not available at the time of writing, nor was the WDI methodology used to arrive at the estimate in that database.

Annex 5. Benefit Incidence Analysis: Methodology and Interpretation of Results

The BIA is a tool to assess how tax policy or government subsidy affects the distribution of welfare in the population. In other words, the BIA evaluates the distribution of government subsidies among different groups in the population, in particular, among different income groups. In the literature, most of the BIAs divide the population into subgroups (for example, quintiles or deciles) based on household per capita income. Since expenditures on health and education are expected to have a redistributive impact, the BIA is centered on assessing whether public spending is progressive, that is, whether it improves the distribution of welfare, proxied by household income or expenditure. Likewise, the BIA shows how the initial 'pre-intervention' position of individuals is altered by public spending or how well public spending serves to redistribute resources to the poor (van de Walle 1995). Put differently, it estimates how much the income of a household would have to be raised if the household fully pays for the subsidized public services (Sabir 2003).

The BIA involves three steps: (a) array individuals or households by per capita income (or expenditures) and group by deciles or percentiles; (b) compute estimate of the unit subsidy of providing a particular type of government service as derived from official data on government spending; and (c) identify users of the government service (based on data on individual or household service utilization) and impute the unit subsidy to the said households or individuals (Demery 2000).

The BIA undertaken for this PER defines quintiles over population, that is, across individuals. Quintiles of population or individuals result when all individuals, ranked by a welfare indicator, in this case per capita expenditure, are divided into five groups containing the same number of individuals regardless of their household membership.

To present the results of the analysis, this annex uses a graphical representation of the distribution of benefits, that is, concentration curve or benefit concentration curve (Figure 56). This curve is generated by plotting the cumulative distribution of 'benefits' of public spending on the y-axis against the cumulative distribution of population sorted by per capita expenditure on the x-axis. One can assess the progressivity or regressivity of a public subsidy by comparing the benefit concentration curve with the 45-degree diagonal and the Lorenz curve of consumption. The diagonal indicates neutrality in the distribution of benefits. If the distribution of benefits lies along this line, the poorest 10 percent of the subsidy, and so on. Thus, the diagonal reflects perfect equality in the distribution of benefits and it is also referred to as a perfect equality line.

The distribution of benefits is said to be progressive if the lower-income groups receive a larger share of the benefits from government spending than the higher-income groups. For instance, if the concentration curve lies above the diagonal, then the poorest 10 percent of the population receives more than 10 percent of the benefits and the distribution of benefits is said to be progressive in absolute terms. Conversely, if the benefit concentration curve lies below the diagonal, then the poorest 10 percent of benefits is said to be regressive in absolute terms.

Source: Cuenca 2008.

Annex 6. The FSM's National Minimum Competency Test

Based on information from the FSM DoE in 2014, the NMCT is the only standard assessment tool currently being used for assessing performance of elementary and secondary students in the FSM. The GoFSM has developed guidelines for the administration of the NMCT, and these require the national DoE in collaboration with the states' DoE to administer the NMCT in math and reading to all the students in the selected grades, beginning in 2013. All private and public schools were included in testing for the school year 2013. The NMCT is administered to grades 6, 8, and 10 in reading and to grades 4, 6, 8, and 10 in math. The assessment is based on the national curriculum standards and benchmarks and is designed to identify weaknesses and strengths in teaching curriculum. In math, the NMCT standards are as follows: Standard 1: numbers, operation, and computation; Standard 2: geometry, measurements, and transformation; Standard 3: patterns and algebra; and Standard 4: statistics and probability. In reading, the standards include reading and literature. While standards and benchmarks are available for each grade, this annex illustrates these for reading and math for grade 8 only.

Grade	Standard	Benchmark	Description
8	2	1	Identify and use a variety of strategies to extend word meaning. (For example, students will be able to correctly apply prefixes and suffixes in order to adapt words for different purposes.)
8	2	2	Build comprehension of texts. (For example, students will be able to ask questions, predict, identify main ideas and supporting details, analyze, summarize and draw logical conclusions.)
8	2	3	Read a variety of printed and media materials for different purposes and discuss opinion of what was read.

Table 6.1. Grade 8 Reading S	Standards and Benchmarks
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Grade	Standard	Benchmark	Indicator	Description
8	1	1		Represent, compare, order and use numbers in a variety of forms (integer, fraction, decimal, percent, and exponents) in mathematical problem-solving situations.
8	1	2		Demonstrate fluency in computing with rational numbers (fractions, decimals, percents, and integers).
8	1	3		Square whole, rational, and integers and find square roots of perfect squares (e.g. 1, 4, 9, 16, etc).
8	1	4		Use ration, proportion, and percents in problem solving.
8	2	1		Use a compass, protractor, and straight edge to draw two- dimensional figures and do constructions (e.g. Bisecting an angle or line segment, creating a right angle, drawing a circle).
8	2	2		Identify similar and congruent figures and including lines of symmetry and diagonals.
8	2	3		Use formulas to find areas of quadrilaterals, triangles, and circles, and the surface area and volume of cylinders as prisms, including appropriate units of measure.
8	2	4		Use the Pythagorean Theorem to find lengths of sides of right triangles.
8	2	5		Solve simple problems involving rates and derived measure (e.g. Miles per hour, cost per yard)
8	2	6		Use proportional reasoning and indirect measurements to draw inferences, such as measuring the thickness of a book to estimate the thickness of one page.
8	3	1		Write and solve two-step linear equations and one-step inequalities.
8	3	2		Graph linear functions in two variables using a table of ordered pairs.
8	3	3		Use symbolic algebra and additional techniques, such as tables, guess and check, and diagrams, to represent situations and to solve problems, especially those that involve linear relationships.
8	3	4		Model and solve real-world problems using various representations, such as graphs and tables, to understand the purpose and utility of each representation.
8	4	1		Find, describe, and interpret mean, median, mode, and range and determine which measure is best to use in a particular situation.
8	4	2		Read and interpret tables, charts, and graphs, and make inferences based on the data.
8	4	3		Use sampling and other data collection tools to gather and analyze data, and make conclusions and predictions.
8	4	4		Compute simple probabilities using appropriate methods such as lists, tree diagrams, or through experimental or simulation activities.

Annex 7. School Grant Program in Myanmar



Annex 8. Incentives for Teacher Performance: Why Focus on Bonus Pay and Job Stability?

In contrast to most of the other incentives for teachers, both contracts without guaranteed tenure and pay-for-performance programs establish direct links between teachers' performance and their rewards or sanctions. Thus, contract tenure and pay-for-performance reforms are potentially two of the strongest instruments at the disposal of education policy makers to increase teachers' accountability for results.

Contract teachers. International evidence suggests that the use of contract teachers can strengthen the scope for local monitoring of teacher performance, resulting in higher teacher effort and hence improved learning. The most rigorous of the seven available evaluations of contract teachers have all found them to be more cost-effective than regular civil service teachers (Bruns, Filmer, and Patrinos 2011). In both Kenya and India, randomized trials have found learning outcomes for students of contract teachers to be equal to or better than those of civil service teachers despite contract teachers' much lower salaries. Nonexperimental studies in two additional states in India found similar results. Earlier evidence on community-hired teachers in Central America (summarized in Vegas 2005) was less robust but also suggested that contract teachers achieve similar or better student grade progression and learning outcomes (controlling for student background) at lower cost. Although contract teachers usually work for lower salaries than their civil service counterparts, the cost-effectiveness of a contract teacher policy is likely to depend on country characteristics and the level of education involved. All of the evaluated cases involved contract teachers at the primary level, for example, where the supply of potential teachers with adequate skills is not as likely to be constrained as at the secondary level, or for specialty subjects such as sciences and math. Second, there are nagging questions about the sustainability of this policy over time. Many of the evaluated cases suggest that contract teachers may accept the lower salaries and insecure tenure because they are queuing for civil service positions.

Teacher bonus incentives. In the right setting, and with the appropriate program parameters, teacher bonus incentives can improve student outcomes. Teacher bonus initiatives in developing countries have proliferated over the past several years, both as small-scale experiments and as high-profile, systemwide reforms. In contrast to the situation just five years ago, and in contrast to recent U.S. evidence, a growing body of developing-country studies suggests that bonus pay incentives can work—at least in settings characterized by weak systems for performance monitoring and accountability, evidenced by relatively high teacher absence rates, low teacher dismissal rates, and low student learning performance.

- Relatively weak teacher professionalism—evidenced in most cases by low standards for entry
- Relatively large bonus size—for example, an annual bonus of 30–300 percent of monthly salary
- Focused performance metrics—emphasis on a small number of key measurable results, notably student learning improvements or relatively easily measured teacher 'inputs' such as monthly attendance, rather than more complex, subjective, and comprehensive performance evaluations
- 'Fair' performance metrics—rewards to schools on a value-added basis (for progress relative to their starting point) or compared with schools with similar geographic and student socioeconomic conditions, not for absolute levels of performance
- Rewards clearly linked to prior period results—annual bonuses directly linked to test or other results for the previous school year or monthly bonuses for input measures monitored over the previous month, such as teacher attendance

Teacher bonus incentives 'work' in the sense that student learning outcomes improve in the presence of the bonus. Across the eight most carefully evaluated cases, the bonus program raised average learning outcomes in incentive schools relative to control schools by about a 0.15 standard deviation; in the highest case, learning outcomes by the second year of the program were a 0.27 standard deviation higher. Although not huge, effects in this order of magnitude are relatively rare across other types of education interventions, and the consistency of positive impacts, across a wide variety of country contexts, is noteworthy. *Source:* Bruns, Filmer, and Patrinos 2011.

Annex 9. General Principles Underlying a GFS System

Uses of the GFS System

The GFS system is designed to provide statistics that enable policy makers and analysts to study developments in the financial operations, financial position, and liquidity situation of the general government sector or the public sector in a consistent and systematic manner. The GFS analytic framework can be used to analyze the operations of a specific level of government and transactions between levels of government as well as the entire general government or public sector.

One method used in the GFS system to produce summary information on the overall performance and financial position of the general government or public sector is through the use of a set of balancing items, such as the net operating balance, net lending/borrowing, and the change in net worth. Such balancing items are most effectively defined and measured within an integrated and comprehensive accounting framework such as the GFS system.

In contrast to summary measures, the detailed data of the GFS system can be used to examine specific areas of government operations. For example, one might want information about particular forms of taxation, the level of expense incurred on a type of social service, or the amount of government borrowing from the banking system.

The harmonization of the GFS system with other macroeconomic statistical systems means that data from the GFS system can be combined with data from other systems to assess general government or public sector developments in relation to the rest of the economy. Similarly, the establishment of internationally recognized standards permits government finance statistics to be used in cross-country analyses of government operations, such as comparisons of ratios of taxes or expense to GDP.

Structure and Features of the GFS System

The GFS system pertains to the general government and public sectors as defined in the 1993 statement of national accounts. These sectors are defined in terms of institutional units, which are economic entities that are capable of owning assets, incurring liabilities, and engaging in economic activities and transactions with other entities in their own right. These characteristics render institutional units a subject of economic and statistical interest that can be satisfied by compilation of a full set of accounts for them, including balance sheets.

Two types of flows are recorded in the GFS system: transactions and other economic flows. For the most part, transactions are interactions between two institutional units that take place by mutual agreement. The Statement of Government Operations records the results of all transactions during an accounting period. They are classified as revenue, expense, net acquisitions of nonfinancial assets, net acquisitions of financial assets, or net incurrences of liabilities. Transactions that generate revenue or expense result in a change in net worth. Other types of transactions result in equal changes to assets and/or liabilities and do not result in a change to net worth. Other economic flows include price changes and a variety of other economic events that affect the holdings of assets and liabilities, such as debt write-offs and catastrophic losses. The Statement of Other Economic Flows summarizes these changes in assets, liabilities, and net worth. The Balance Sheet for the general government or public sector is a statement of the stocks of financial and nonfinancial assets owned, the stock of claims of other units against the owners of those assets in the form of liabilities, and the sector's net worth, equal to the total value of all assets less the total value of all liabilities.

The comprehensive treatment of transactions and other economic flows in the GFS system enables the opening and closing balance sheets to be reconciled fully. That is, the stock of a given type of asset or liability at the beginning of an accounting period plus the changes in that stock indicated by transactions and other economic flows equals the stock at the end of the period. Such an integrated statistical system permits the effects of policies and specific economic events to be described and analyzed fully.

Various classifications are applied to the flows and stocks recorded in the GFS system. For example, each revenue transaction is classified according to whether it is a tax or another type of revenue, expense transactions are classified by purpose and by economic type, assets are classified according to whether they are financial or nonfinancial, and financial assets and liabilities are classified both by type of instrument and the sector of the unit that issued the asset held by government or that holds the liability issued by government.

Despite harmonization of the GFS system with the 1993 SNA, there are differences between the two statistical systems. The most important difference is that the focus of the GFS system is on financial transactions—taxing, spending, borrowing, and lending—while the 1993 SNA also focuses on the production and consumption of goods and services. As a result, the treatment of government productive activities in the GFS system differs substantially from the treatment of those activities in the 1993 SNA. Significant differences relate to the treatment of own-account capital formation, retirement schemes for government employees, and the degree of consolidation.

In many cases, the compilation of government finance statistics will be the first step in the compilation of statistics for the general government sector of the national accounts. For this reason, some data that normally would not appear in a standard GFS presentation should be maintained in subsidiary records because they are needed for the national accounts. For example, the detailed estimates of retirement schemes for government employees should be maintained so that the different treatment of such schemes in the 1993 SNA can be accommodated.

Definitions of concepts in the GFS system are the same as in the 1993 SNA, but the coverage of a particular category of transactions may be slightly different. For example, compensation of employees recorded as an expense in the GFS system does not include the compensation of employees engaged in own-account capital formation, but compensation of employees in the 1993 SNA includes the compensation of all employees. The definition and composition of compensation of employees, however, is identical in both systems. Using the same name when the coverage is different could be misleading. To identify where the coverage or some other aspect of a concept differs from the same concept in the 1993 SNA, the indicator '[GFS]' is added after the GFS title and an explanation of the difference is provided.

Contingencies, such as loan guarantees and implicit guarantees to provide social benefits when various needs arise, can have important economic influences on the general economy but do not result in transactions or other economic flows recorded in the GFS system until the event or condition referred to actually occurs. As a result, provision is made for recording contingencies as memorandum items.

In terms of the implementation of the GFS system, some countries may be able, at least initially, to compile only a small part of the GFS system. It is not appropriate to lay down general priorities for data collection when economic circumstances may vary so much from one country to another. In practice, priorities usually are best established by national authorities that are familiar with the situation, needs, and problems of the individual countries in question and may require parallel TA.

Source: Government Finance Statistics Manual 2001 (IMF 2001).

Annex 10. International Examples of School Funding Formulae

There are several models for funding of schools and these were documented in Levačić (2006). It highlighted four main types of factors in the derivation of financing formula: (a) basic pupil numbers weighted by different age or grade of education; (b) curriculum-related formula (notably to reflect language teaching); (c) pupil-related factors (notably reflecting disadvantage for particular socioeconomic and minority groups); and (d) school-related factors (notably small size and geographic location). To reflect the significant differences in the precision of some formulae, some additional subcategories within the four main headings are added. A particular feature is the use of 'safety netting' for a limited period to assist the gains or losses of moving to a formula-based system. Australia and California, USA are two countries with the 'safety netting' criterion. The following are important considerations for each of the four blocks with country examples.

(a) Block Grants - by Pupil Numbers

The calculation of pupil numbers is either derived from the actual enrolment on a fixed census date (which is then fed into the annual education management information system statistics) or on an average daily enrolment where the data can be regularly updated. Most countries using a census approach select a date close to the start of the school year; this may not therefore reflect dropout over the school year and is open to some degree of manipulation. Furthermore, since the EMIS system is updated only once a year, the census data is used retrospectively (that is, the data of the previous year are used).

The weighting of the student numbers is important, particularly if the formula reflects staffing costs. In general, most formula systems use a three- or four-level approach depending on whether preschool is included. Preschool students generally carry a higher weighting because of the need for lower class sizes and higher staffing ratios (and also to some extent more varied equipment). Higher secondary also usually attracts greater weights because of subject specialism and, therefore, lower class sizes as well as the need for more science and vocational equipment. Both New Zealand and Republic of Korea's funding formula reflect such student weights. New Zealand groups students in four age groups: primary grade 1–6, secondary grade 7–8, 9–10, and 11–12. In Korea, preschool (KG), primary, junior secondary, and high school are the four student allocation levels.

(b) Block Grants - by Curriculum

The main weighting given on curriculum concerns the provision of alternative language education apart from the primary language of instruction. This can be either dual language provision for a large number of students or schools or provision of an alternative language medium at schools for a minority community. Examples can be found in Estonia; Ontario, Canada; and New Zealand. In Estonia, the government overfunds places where there is a sufficient minority of students in any municipality who wish to study in one of the two main languages of instruction (Estonian or Russian). In Ontario, Canada, the government funds both language and cultural studies for 'First American' and Innuit groups. Funding for additional language provision should be distinguished from support for additional remedial language help for non-native speakers; this is dealt with under the pupil disadvantage block. In New Zealand, the government funds Maori Immersion schools based on four levels of the extent to which the curriculum is partially or completely taught in Maori.

Other curriculum enhancements can be for particular specialism schools requiring specialized teachers and equipment. These can include music and performing arts, specialist science and medical vocational skills, and sports. For example, Poland has 14 additional weights to reflect specialist types of education in music, art, health, and sports, while Lithuania has different weightings for vocational schools.

(c) Block Grants - by Disadvantaged Pupil Criteria

Disadvantaged pupils are reflected in formula funding for three types of disadvantages. The first group of weights is for various forms of special learning needs arising from physical or learning difficulties. In some countries, these additional weightings are only for pupils studying in mainstream schools; in other countries, special schools are included wholly within the funding formula and the weights allocated are large, given the often small sizes of the schools and the specialist nature of care that is needed. Countries that provide additional weights for special needs students include Australia; New Zealand; and Ontario, Canada.

The second group of weights concerns socioeconomic disadvantage. This is usually identified through a proxy indicator such as eligibility for free or reduced price school meals (in Malaysia, the personal income tax threshold or the distribution of special family subsidies for households with income under MYR 2,500 per month could also be used). Another indicator of disadvantage that is often used is the low educational background of one or both parents which is found from census information. The example of Ontario, Canada, exemplifies this type of weights: special allocations are given to four socioeconomically disadvantaged groups: (a) low-income; (b) recent immigration to Canada; (c) single parent; and (d) low parent education. In a number of countries (for example, Australia, New Zealand and some U.S. states), an additional amount is added to reflect the impact on learning needs and resources of a concentration of pupils of socioeconomic disadvantage, which are assessed by quartiles or deciles. For example, Australia provides extra allocation to schools that have a concentration of pupils from the two lowest socioeconomic quartiles. In California, this compensates for the fact that pupils cannot be weighted twice for different factors.

The third category concerns pupil disadvantages relating to being immigrant children whose native language is not the medium of instruction. In the United Kingdom, for example, this language allocation must be calculated on a pupil-by-pupil basis and is limited to a three-year period of adjustment although the rate may be higher for secondary compared to primary pupils, to reflect higher costs of acquiring fluency at a later age of entry into school. In Australia, students who come from a non-English background and have parent(s) completing limited English courses are given more allocation. In Norway, 3.4 percent of funding is allocated to non-Scandinavian-speaking students who are either children from non-Scandinavian countries or Norwegians born with immigrant parents from non-Scandinavian countries.

(d) Block Grants - by School-related Criteria

The school-related criteria usually consist of three main elements. The first is block allocations to reflect the fixed costs of schools. These block allocations are usually made to support smaller schools that are at a disadvantage in heavily pupil-driven formula allocations. For example, Australia provides special small school allocations. The maximum additional funding is AUD 150,000 for primary schools and AUD 240,000 for secondary schools. Similarly, England provides a lump sum (optional) of up to GBP 200,000 for small schools.

The second class of criteria relates to reflecting the higher costs of geographic locations which are often but not always linked to smaller schools. Usually this relates to the higher costs of providing educational facilities in areas with scattered populations (which may include higher costs of home to school transport, educational supplies, and utilities plus extra salary supplements for teachers.) However, they can also reflect higher urban living costs for teachers working in high cost areas in or near major cities. Examples for this type of location-specific weights can be found in New Zealand, Armenia, and Norway. In New Zealand, isolated schools receive additional funding. Armenia places an allocation weight of 1.02 and 1.2, respectively, for schools that are in mountainous areas and high mountainous areas, to support extra cost. In Norway, 5.08 percent of allocations target location-related costs, based on two criteria: the number of different zones having 2,000 inhabitants and the number of wards in each municipality.

The third class of criteria reflects special school characteristics and higher costs such as split sites; the use of historic buildings; safety and security issues; or, as in parts of former Soviet Union countries and China, different winter heating needs and systems.

Source: World Bank. 2014. "Policy Note on School Funding Formula and Pilot Options for Negeri Sembilan, Malaysia."



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