1 Economic Overview

1.1 Macroeconomic Performance 2004-2023

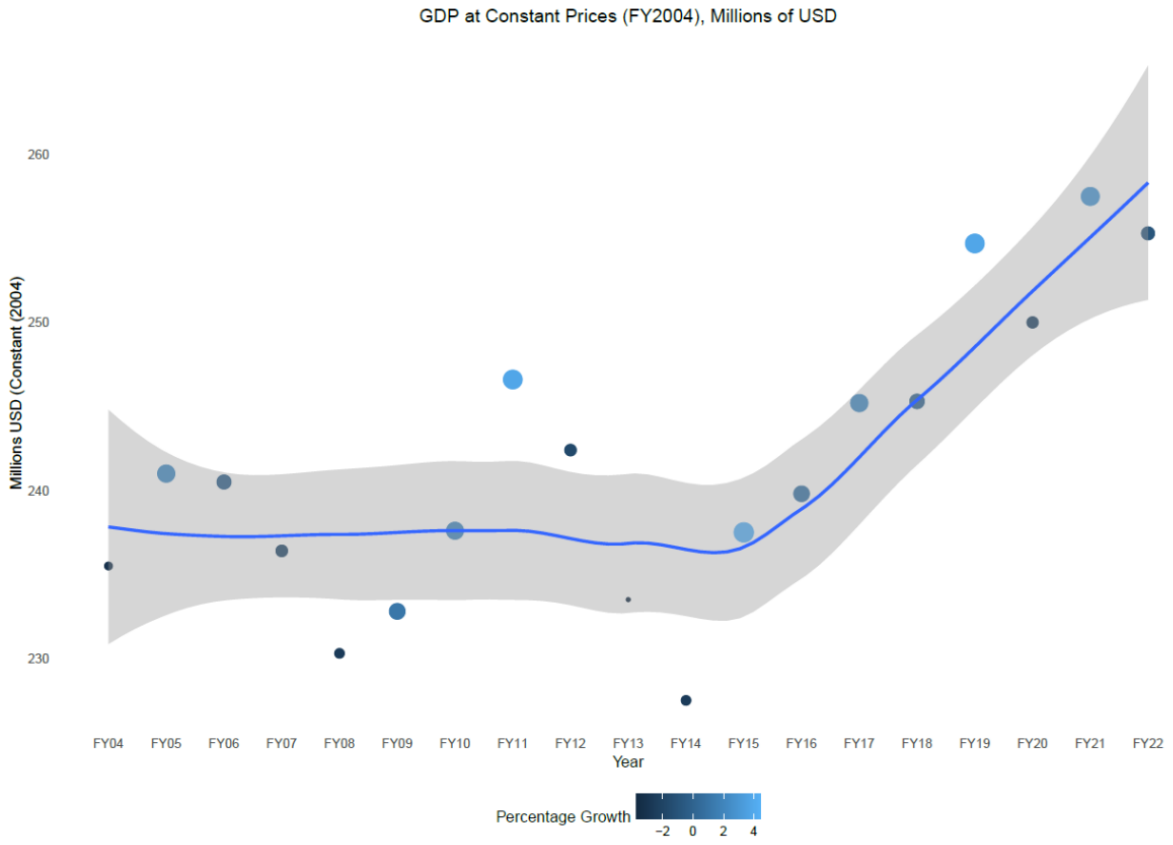
1.1.1 National Macroeconomic Overview

As a remote, climate-vulnerable, Small-Island Development State (SIDS), the Federated States of Micronesia (FSM) faces substantial macroeconomic headwinds. With limited land, a small and shrinking workforce, a lack of monetary policy autonomy, few natural resources beyond its fisheries, and significant physical distance to major markets, the FSM has limited options in pursuing economic growth models. Like many other SIDS, the FSM economy from 2004-2023 can be reasonably classified as a "MIRAB" economy, one that is reliant on migration, remittances, aid and bureaucracy. These flows primarily finance government and household consumption, and the private sector consists largely of retail and other services that cater to this demand. The government, household, and public sectors dominate the FSM economy and are supported, to a very large extent, by external aid transfers, largely via grants and other funding under the Compact of Free Association (COFA) with the United States of America as well as via other resource transfers. While the FSM government also derives substantial revenue via licensing of its fisheries resource and corporate tax of domestically domiciled foreign firms, these revenues are both volatile and potentially unsustainable over the long term. Collectively, these resources have kept government finances stable and obviated the need for accumulating substantial external debt. However, as a small, open, economy, the FSM has been vulnerable to global shocks including the 2008 Global Financial Crisis and the COVID-19 pandemic as well as volatility in funding disbursement under the COFA. Continued and increased funding under an amended 2024-2043 COFA, in combination with substantial COFA and domestic trust funds, will provide a basis for macroeconomic stability through 2043 and beyond. While inherent challenges to domestic, private sector-led growth remain, these can be mitigated via public investment and policy reform.

1.1.1.1 National Accounts

Overall, the economy of the FSM has not achieved the economic ambitions of the 2004-2023 Strategic Development Plan (SDP). As shown in Figure 1.1, from 2004 to 2022, real Gross Domestic Project has increased by less than 5% in aggregate which equates to an annualized GDP growth rate of less than 0.3%. Comparatively, excluding the COVID-19 shock and recovery, this growth rate considerably lags both the regional average growth rate of the Pacific Island Countries of 2.7%, and the average growth rate of all Lower Middle-Income Countries (LMICs) for 5.72%.

Figure 1.1



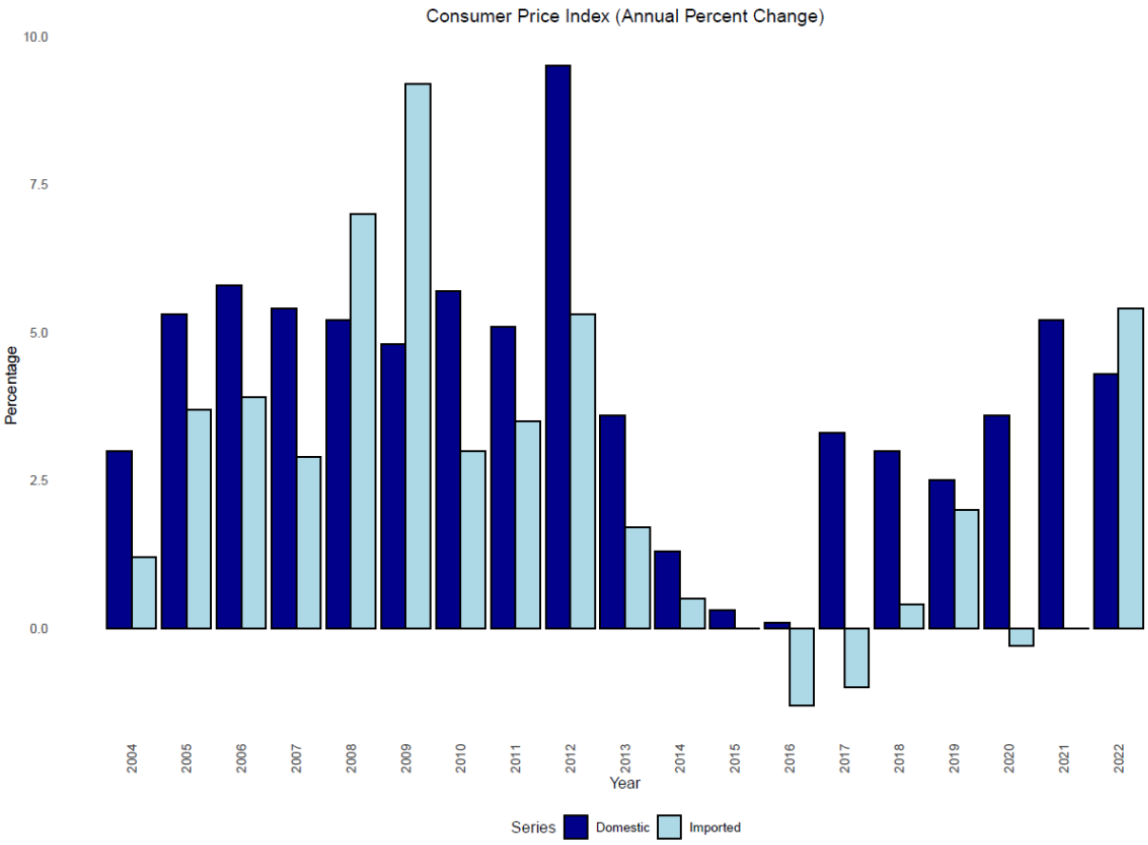
The locally-smoothed trend line in Figure 1.1 illustrates two distinct periods of economic performance over the past 20 years. From FY2004 to FY2015, the FSM economy experienced a high degree of volatility, which ultimately translated to a "lost decade" of growth, with total growth of 0.85% over the period. The 2008 Global Financial Crisis led to a significant economic contraction, with GDP falling by 4.25% from its FY2006 level. The subsequent rebound from FY2008 to FY2011 was wiped out by three straight years of contraction from FY2012-2014, including a nearly 4% fall in FY2013 alone. This contraction was driven by a fall in GDP contribution from productive enterprises, especially in the private sector, and is largely attributed to difficulties in implementing and expending the COFA public infrastructure sector grants. While Gross National Income (GNI) and Gross National Disposable Income (GNDI) are higher than GDP due to net surpluses in primary and secondary items, they follow similar trends and have also stagnated over the collective FY2004-FY2022 period.

Since FY2014, the FSM has experienced sustained, if unremarkable, growth. From FY2014 to FY2022, the economy grew by just over 12%, or an annualized rate of 1.5%. While still lagging its peers, this upward trajectory reflects a marked difference from the first 10 years of the period and is largely attributable to a combination of increased government revenues from fisheries license fees and corporate tax revenues, and a restarting of stalled COFA public infrastructure sector projects.

1.1.1.2 Prices

As a small, open, economy that is heavily reliant on the consumption of imported goods, the FSM is particularly sensitive to global price shocks. Table 1.1 shows the annual percentage change in the Consumer Price Index (CPI) for domestic and imported items, respectively.

Figure 1.2



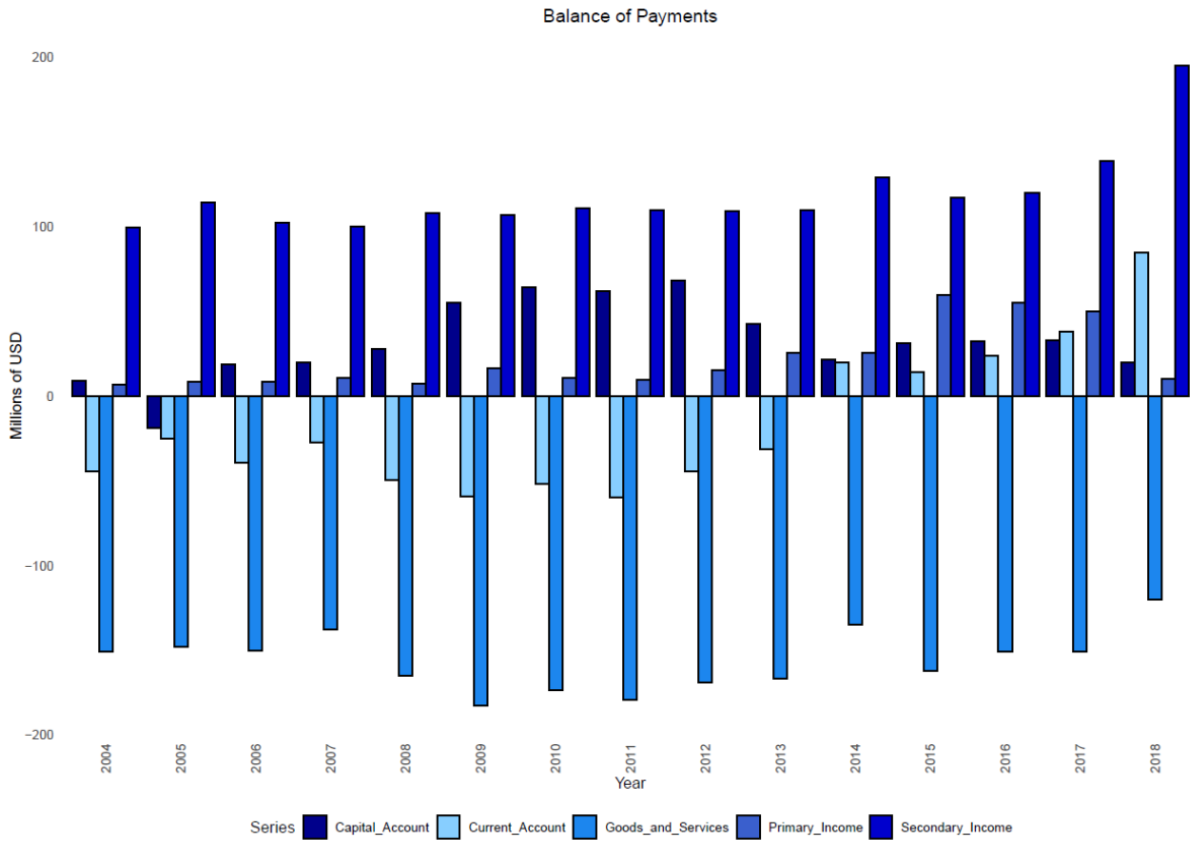
The first 10 years of the Amended Compact period, which coincided with a period of stagnant growth, also saw considerable price increases in both domestic and imported goods, with average annual changes of 4.1% and 5.3% in the imported and domestic CPI, respectively. Given the FSM economy's reliance on externally financed consumption, these price increases eroded household and government purchasing power and constrained economic activity. In the second 10 years, prices, especially of imported goods, moderated substantially, with average annual increases of 0.6% and 2.6% in imported and domestic goods, respectively, even when accounting for the post-pandemic inflationary pressures in FY2022. In the absence of monetary policy autonomy, the FSM can only pursue domestic price stability through internal re/devaluation via fiscal policy.

1.1.1.3 Balance of Payments

The FSM economy's reliance on the consumption of imports is visible in the persistently negative goods and service balance in the current account displayed in Figure 1.3. The

deficit, which has averaged over 50% of GDP, has been financed by extraordinary surpluses in primary and secondary income, as opposed to significant surpluses in the capital or financial accounts. In the FSM, the primary income surpluses are largely comprised of income from fishing license fees to foreign operators while the secondary income surpluses consist of foreign development assistance, including the COFA and, in the latter part of the past 20 years, corporate tax receipts from non-resident companies. Since 2014 through the end of available data in 2018, increases in these income sources have led the FSM to overall current account surpluses. Foreign Direct Investment (FDI) has been anemic, with inflows of less than $1 million in most years between FY2004 and FY2018.

Figure 1.3



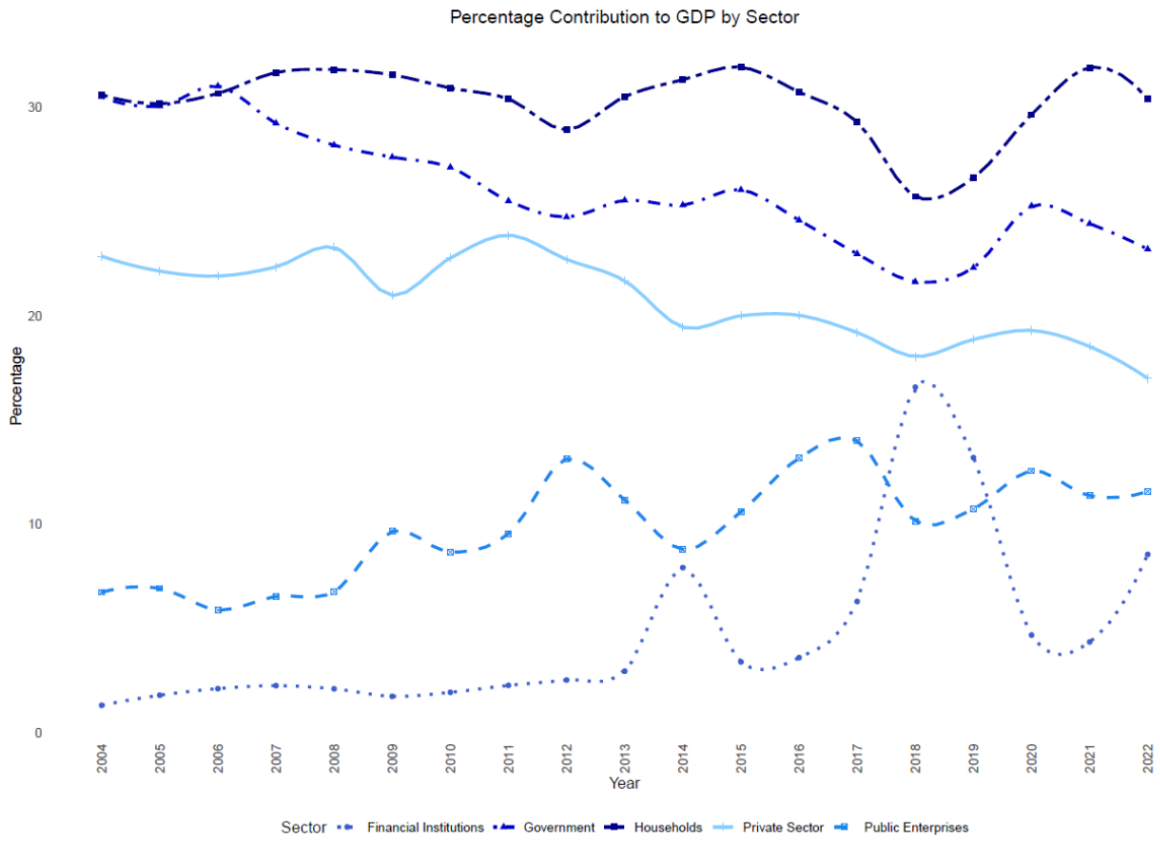
While the FSM has faced no major Balance of Payments problems in its history, the structure of its national accounts is atypical. The reliance on primary and secondary income to cover a deficit in trade in goods and services implies that, in the absence of this income, the FSM could face a significant Balance of Payments crisis. However, as the 2023 Amended COFA now includes a further 20 years of mandatory grant payments, the situation is stable. Following FY2043, it is likely that the FSM will have sufficient assets in the COFA and domestic trust funds to finance goods and services deficits via income or sales of these assets.

1.1.1.4 Sectoral Analysis

The FSM economy can be further disaggregated by institutional and industry sectors

under the International Standard Industrial Classification of All Economic Activities (ISIC) codes. Institutionally, as shown in Figure 1.4, the structure of the FSM has remained largely stable over the previous 20 years. The FSM economy relies heavily on the Government and Household Sectors, which combined accounted for an average of over 55% of the FSM economy from FY2004 to FY2022, although the Government's share of the economy has declined over the period. However, this decline has been largely captured by the increase in the share of Public Enterprises, which grew from less than 7% of the economy from FY2004 to FY2008 to more than 10% from FY2015, such that the combined public sector share has remained roughly stable at around 35% of GDP. Notably, private sector activity accounted for only 1/5th of economic activity during the time period. Financial Institutions, which comprised less than 3% of the economy from 2004 to 2013, have since accounted for as much as 16% of the economy in 2018, although this sector's contribution has been highly volatile as it is directly related to the amount of activity under the FSM's non-resident corporate taxation in each year.

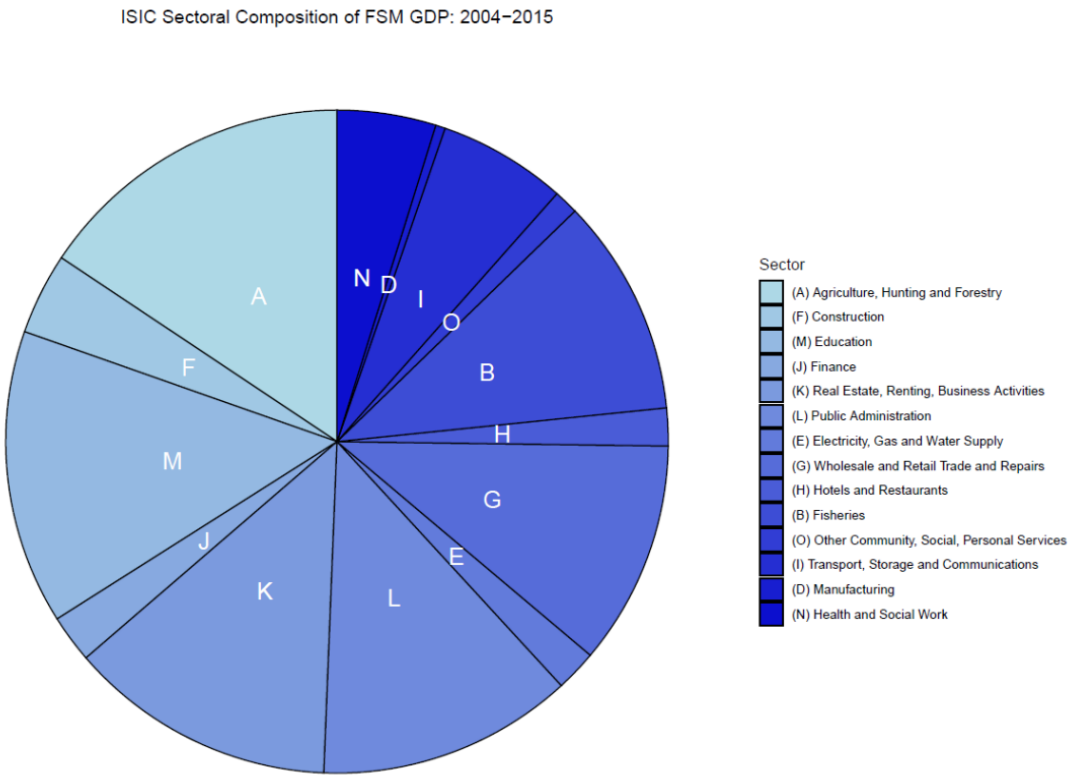
Figure 1.4



Turning to the ISIC industrial sectors, in Figure 1.5 it is again evident that the FSM econonmy is dominated by household and government-led sectors. Using data from FY2004 to FY2015, the latest available, the sector with the largest average share is sector "A", Agriculture, Hunting and Forestry, at just over 15% of the economy. Most of

this activity is conducted by households for subsitence or local, small-scale, commercial production. The sector is followed closely by the Education sector (“M”), which comprises over 14% of the economy and is primary a public sector activity. Other major sectors including Real Estate, Renting, Business Activities “K” (13%) and Public Administration “L” (12%) are also sectors dominated by household and government activity, respectively. The largest sector composed primarily of private sector activity is Wholesale and Retail Trade “G” (11%) which consists primarily of retail establishments selling imported goods. Other than the Fisheries sector “B” (11%), additional tradable goods production comprises only a sliver of the economy, with Manufacturing “D” accounting for less than 0.5% of GDP over the time period.

Figure 1.5



While the truncated data limits the ability to fully assess trends over the past 20 years, most of the sectors are exceedling stable, with coefficients of variation (CVs) of less than 15%, implying little volatility in sector shares of the economy. The most notable exception is Manufacturing, although the main volatility here was a significant drop in activity from FY2004 to FY2005, with the share being quite stable since FY2006 and in all years this sector was a very small share of the economy. The only major sector with more considerable volatility is the Construction sector (“F”), which while comprising ~4% of the economy over the period, had a CV of over 40%, mainly driven by a spike of activity from FY2008 to FY2012, and subsequent fall from FY2013 to FY2015. This

reflects the volatility with use of the COFA infrastructure sector grant. Overall, the institutional and industrial sector analyses reveal a static economy that is dominated by small-scale household and public-sector activity. The share of private sector activity is low and consisted primarily of activity in non-tradable services, namely wholesale and retail activities.

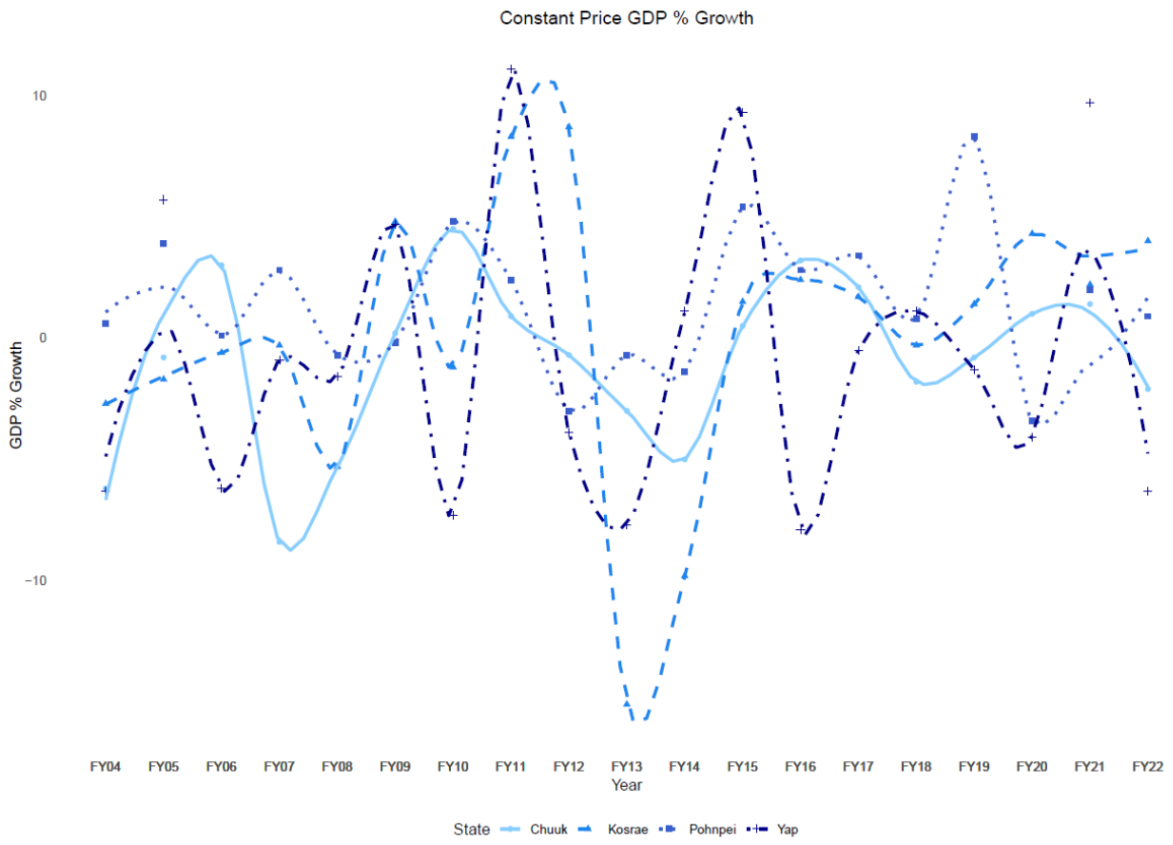
1.1.2 State Macroeconomic Overviews

Like many economies, the FSM economy displays significant regional variation. As a loose federation, many important economic policies are set at the state level, including land titling, business registration, investment policies, and important components of fiscal policy. The states also have large public sectors and are responsible for the provision of key public services including health and education. Each state has its own language, geography and demographics.

1.1.2.1 Growth

Growth in each of the four FSM states has been highly volatile over the past 20 years. Figure 1.6, which displays GDP growth rates by state and year, illustrates this volatility, revealing highly oscillating growth trajectories in all four states.

Figure 1.6

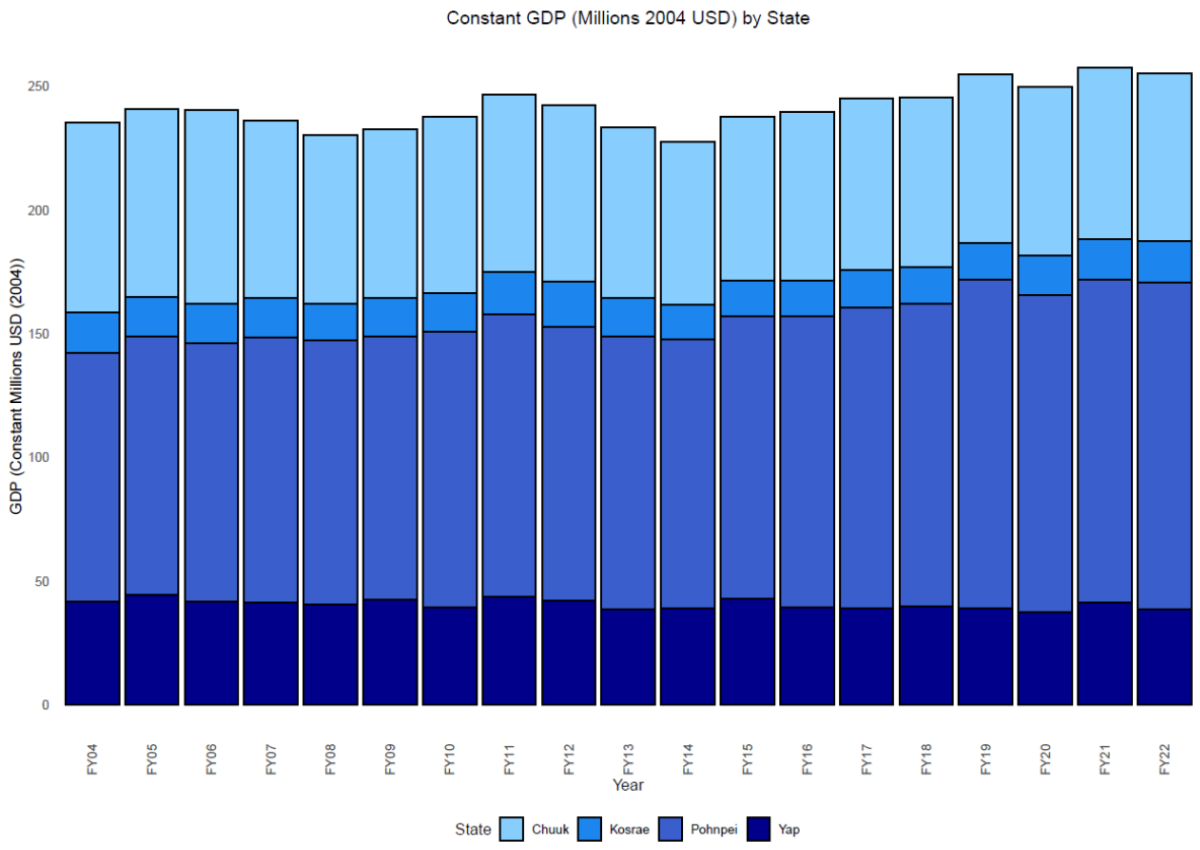


Across the four states, growth swung from positive to negative, or negative to positive, a total of 33 times over the 20 years, or on average every 2.5 years for each state. These

boom-and-bust cycles were largely driven by the implementation, or lack thereof, of the COFA infrastructure or other large capital grants. In total, the states were in recession in nearly half of the past 20 years, with Pohnpei in recession in 6 of the 20 years, Chuuk and Kosrae in 9 of the years, and Yap in 11 of the years.

While all of the states experienced significant variation in their growth rates, there was also substantial variation in their overall performances over the past 20 years. Figure 1.7 illustrates the FSM GDP by state contribution. As shown there, only two of the four states, Pohnpei and Kosrae, experienced overall growth between 2004 and 2022, while both the Chuukese and Yapese economies shrunk over the same period. Total growth in Kosrae amounted to less than 2% over the period, or an annualized rate of roughly 0.1%. Only Pohnpei experienced marked growth, with an economy over 30% larger in 2022 compared to 2004, which, while better than its sister states, still represents a relatively sluggish annualized growth rate of 1.5%. This comparatively better performance can be largely attributed to Pohnpei hosting most of the National Government entities and employees, but also serving as the national and regional headquarters for a number of international organizations and non-for-profit entities.

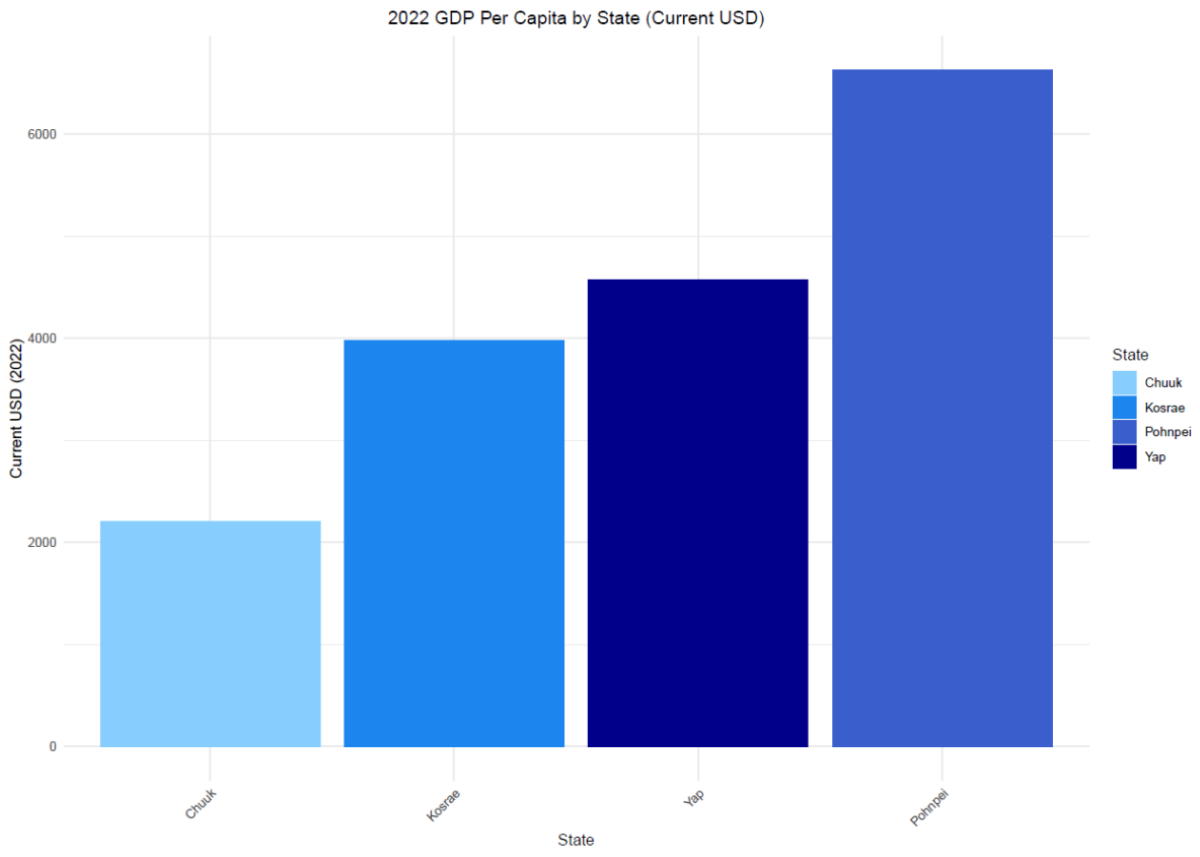
Figure 1.7



While a lack of recent population data hinders the ability to assess trends in *per capita* economic growth, populations estimates allow for a static description of per capita income levels. Using population trend estimates and current-price GDP, Figure 1.8

displays the per capita GDP levels in each of the states in 2022. As shown there, Pohnpei again leads the way, with a current-price GDP per capita estimate of over $6600. This is roughly three times the per capita income of Chuuk at $2200, with Kosrae (~$4000) and Yap (~$4500) in between. These income levels would place Chuuk and Kosrae at the lower and upper ends of the World Bank's "lower-middle income" classification, respectively, and Yap and Pohnpei at the lower ends of the "upper-middle income" classification for 2022. However, these per capita estimates should be highly caveated as more recent, but preliminary, population estimates suggest that the FSM may have experienced a significant population *decline* since 2010. Without data on the extent of this decline, by state, it is not possible to speculate on how this trend might have affected per capita income in each state, although, in general, it would suggest increased per capita income levels compared to those presented in Figure 1.8.

Figure 1.8

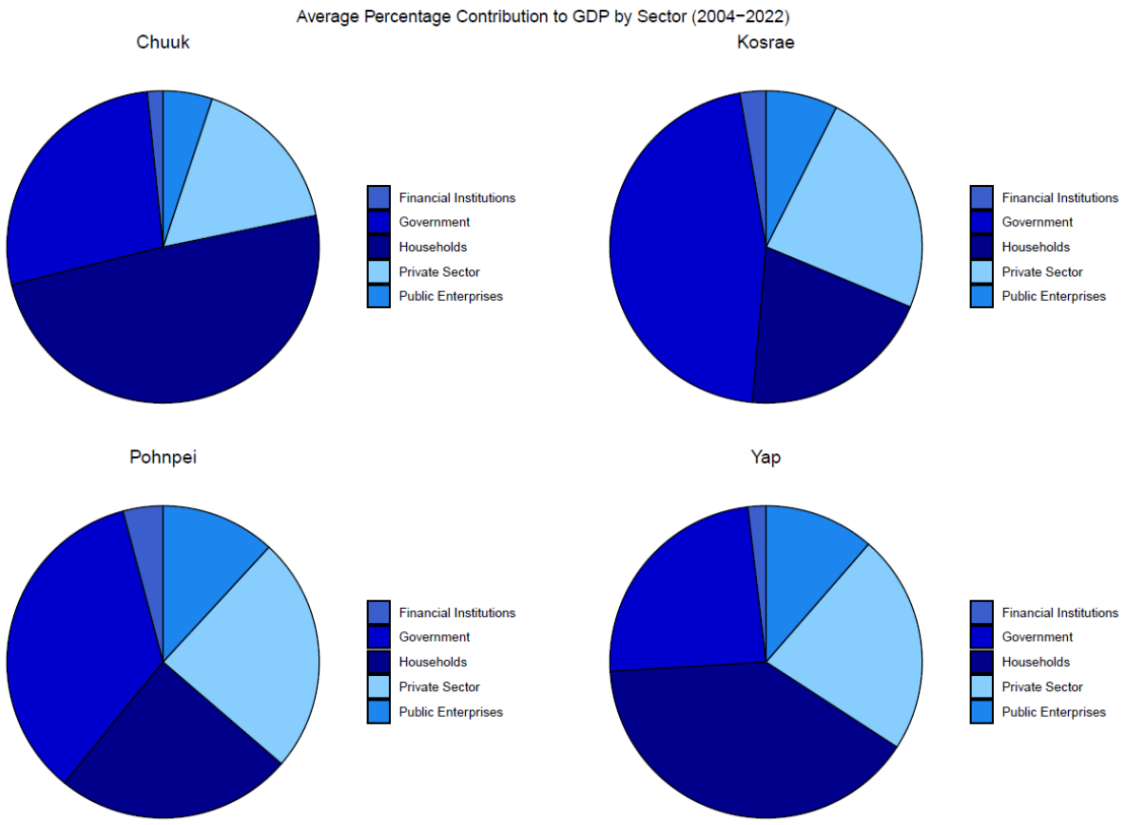


1.1.2.2 Sectoral Analyses

From an institutional perspective, the state economies were dominated by the Household and Government sectors from 2004 to 2022, like the FSM economy as a whole. Figure 1.9 presents a pie chart of the average institutional sectoral share in each state from 2004 to 2022. As shown there, for all states, the Household (darkest) and Government (second darkest) sectors combined to account for the majority of the economy, collectively comprising anywhere from 55% of Pohnpei GDP to over 70% of

GDP in Chuuk. However, in these latter two states, Household activity was the largest share, accounting, on average, for over 36% of the economy in Yap and over 45% of in Chuuk from 2004 to 2022. In contrast, in Kosrae and Pohnpei, Government was the largest sector, averaging 43% and 32% of each economy from 2004 to 2022, respectively. This structural difference is attributable to the differing geographic demographics of the four states. In Yap and Chuuk significant proportions of the population live on islands outside the administrative and economic centers where subsistence household production is the main form of economic activity. In Yap, 35% of the population lives on outer islands while, in Chuuk, 70% of the population lives outside the North Namoneas islands, and over 25% of the population lives outside of Chuuk Lagoon. In contrast, over 95% of the population of Pohnpei lives on the main island and Kosrae has no populated outer islands. Uniquely, in Kosrae, the Private Sector (lightest) was the second largest institutional sector, accounting for 22% of the economy, compared to a 19% contribution for Households. While the private sector accounted for over 20% of the economy in Kosrae, Pohnpei and Yap, in Chuuk it accounted for just over 15%.

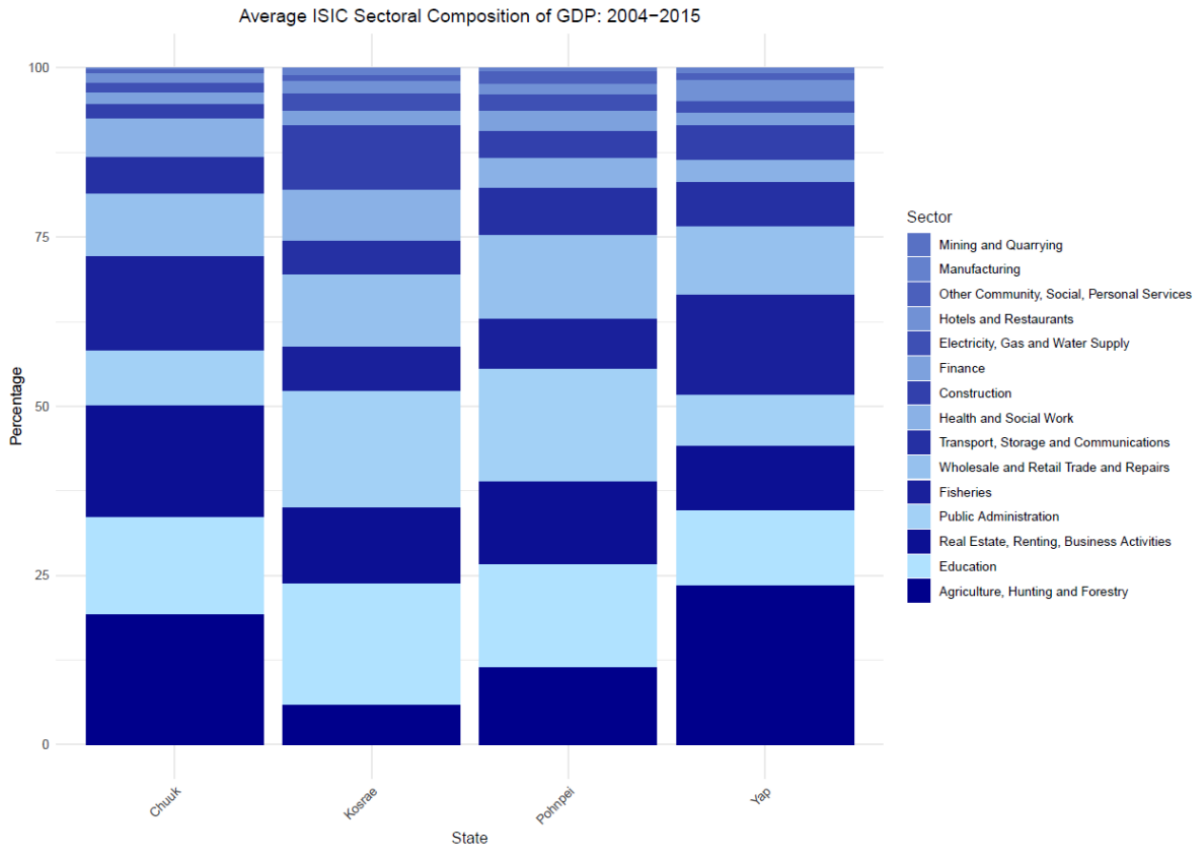
Figure 1.9



As with the national government, at the industry level, the state economies are dominated by sectors whose activities are predominantly conducted by households or governments. Figure 1.10 presents the average sectoral composition of each state's

economy from 2004 to 2015, the last year for which industrial sector data is available. This data comports with that of the institutional sector analysis above, with both Chuuk and Yap having the "Agriculture, Hunting and Forestry" sector as the largest in each of their economies at 19% and 23%, respectively. Again, this activity is largely either for subsistence use or small-scale production for local domestic markets. In contrast, the largest sector in Kosrae is Education at 18% and Public Administration in Pohnpei at 17%. In each of these two states, the next largest sector is the converse with Kosrae's second largest sector is Public Administration at 17% while in Pohnpei the second largest is Education at 15%. Production in both of those sectors is primarily public-sector activity. As with the FSM economy as a whole, the Wholesale and Retail trade is a major private sector activity, accounting for roughly 10% of GDP across each of the four states, although in Kosrae, construction activity also accounts for nearly 10% of GDP, again driven primary by COFA infrastructure and other capital grants. While still comparatively small, "Hotels and Restaurants" commands a share of the Yapese economy in excess of 3%, versus 1% in the other states, reflective of comparatively elevated tourist activity in Yap compared to the other states, adjusted for the size of the Yapese economy.

Figure 1.10



In sum, the sectoral breakdown of the states largely mirrors that of the national government, although there is some notable heterogeneity by state. Most importantly, Chuuk and Yap, with larger proportions of their populations outside the main

administrative and economic centers, have economies that are structured more heavily by subsistence household activity. In contrast, the economies in Kosrae, and particularly Pohnpei, are driven to a greater extent by public sector activities. In all states, tradable sectors (manufacturing or tradable services like tourism) comprise very small shares of the economy.

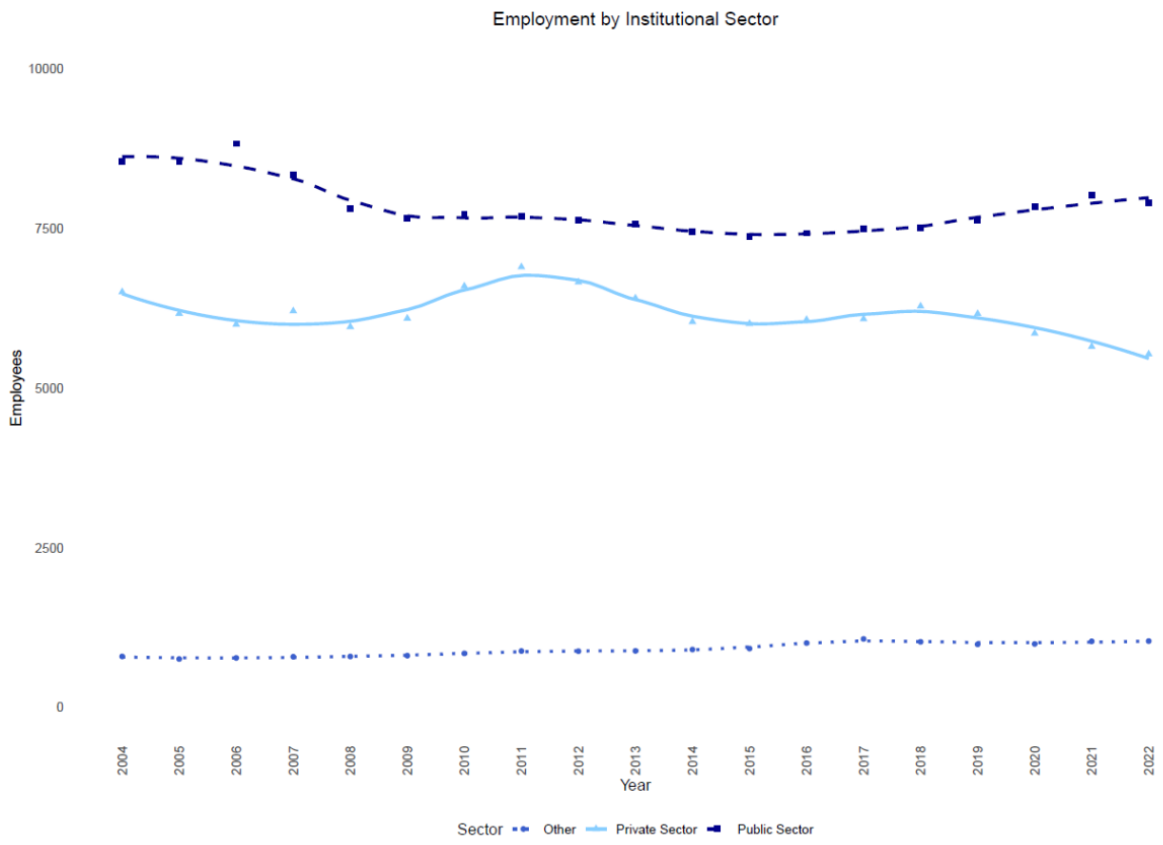
1.2 Household Economic Overview 2004-2023

Given the lack of tradable production and high consumptions levels, households tend to be subsistence based, supported by public sector wages, or some combination of the two. “Subsistence abundance” driven by a favorable agriculture climate and inshore fisheries and a large, well-paying, public sector significantly distort the reservation wage such that many private employers find it difficult to hire FSM citizens and turn to imported labor, particularly in low-wage sectors.

1.2.1 Employment

The FSM economy operates well below full employment. While time series data are unavailable, the 2010 census indicates a national unemployment rate of 16%, varying from over 23% in Kosrae to 6% in Yap. This is combined with a labor force participation rate (i.e. those working age individuals who are employed or seeking employment) of 57%, indicating that less than half of all working age individuals in the FSM are engaged

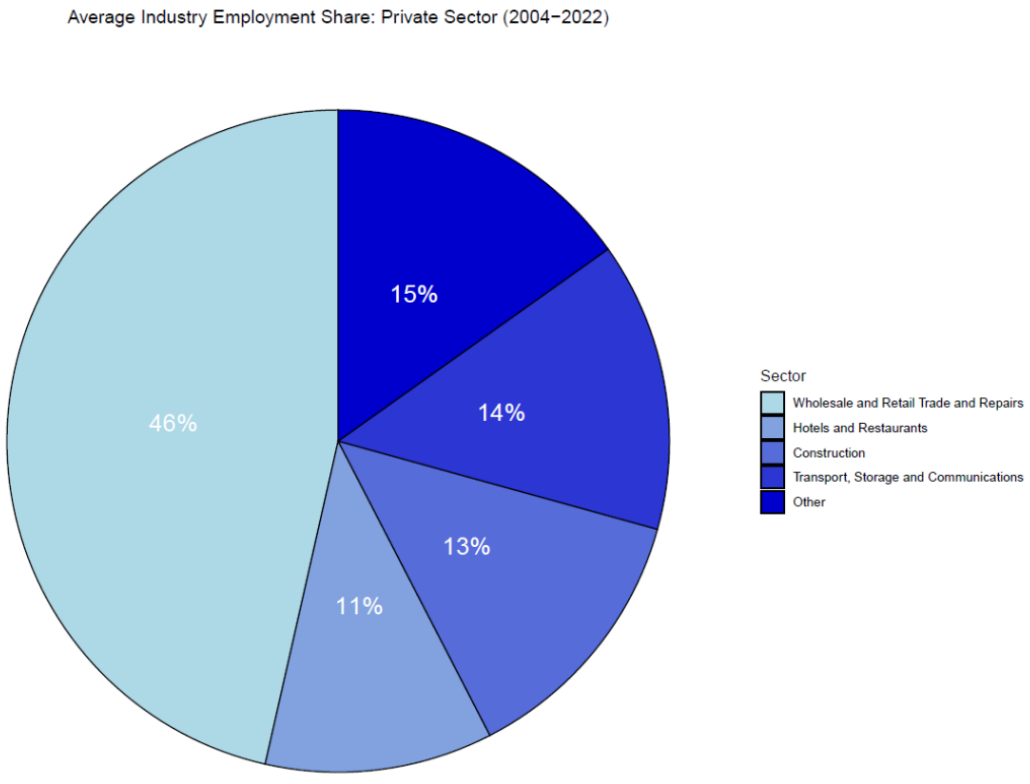
Figure 1.11



in formal employment. This is contrasted to a labor force participation rate in the Pacific Island Small States that is in excess of 65% and an unemployment rate of 6%. While the 2010 census, which occurred during the global financial crisis, is likely not indicative of the 2004-2023 period, other comparative statistics suggest that the FSM has higher levels of unemployment than its Pacific Island peers. However, like its peers, the FSM also has a significant gender gap in labor force participation, with a rate of 66% for males compared to 48% for females in 2010.

On a sectoral basis, the majority of formally employed individuals work in the public sector. As shown in Figure 1.11, Public Sector employment, across all governments and public entities, averaged 53% of all employment from 2004 to 2022, while Private Sector employment averaged 41%. In total number, employment in both sectors fell in line with an overall fall in the size of the FSM labor force, although employment in the Public Sector expanded by 7% between 2015 and 2022. Employment in other sectors, namely financial institutions and foreign embassies, did expand slightly from 2004 to 2022, but remains a small overall share of the labor force.

Figure 1.12



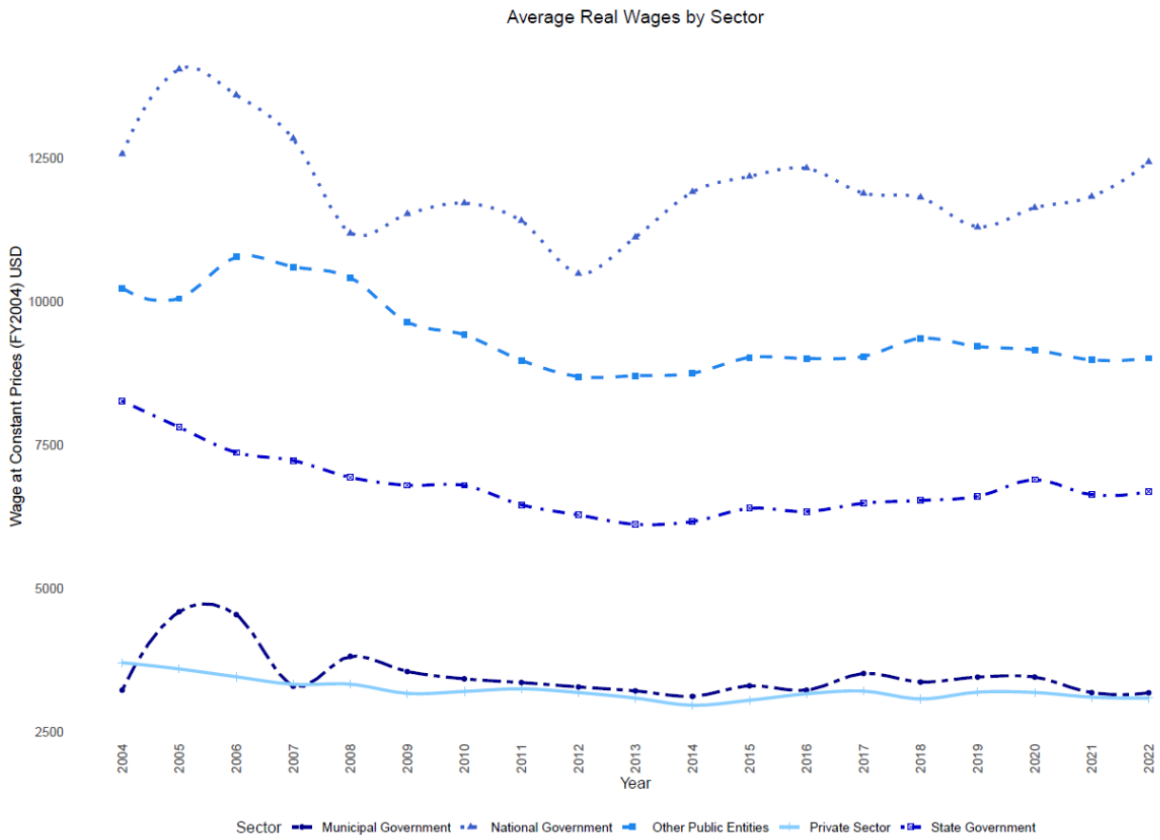
As shown in Figure 1.12, within the Private Sector, employment remains concentrated in low value-added industries with the retail and hospitality sectors accounting for nearly 60% of the employment in industries that are primarily comprised of Private Sector employment, with the bulk of this employment in Wholesale and Retail Trade and

Repairs. Notably, these numbers understate the shares as the "Transport, Storage and Communications" sector does not disaggregate those employees working the public sector communications enterprises, and many employees in this sector would work for public enterprises.

1.2.2 Wages

The heavy public sector employment share can be attributed, in part, to a significant wage premium between the public and private sector. As displayed in Figure 1.13, real wages have stagnated or fallen across the institutional sectors since 2004. The wage public sector wage premium is substantial, ranging from a National Government average wage that is almost 300% of the average Private Sector wage to a Municipal Government average wage that is 108% that of the average Private Sector wage. The bulk of public sector employees work in State Government, and there the average wage is 210% of that in the public sector. While comparative data are sparse, these premiums would be amongst the highest in the world.

Figure 1.13

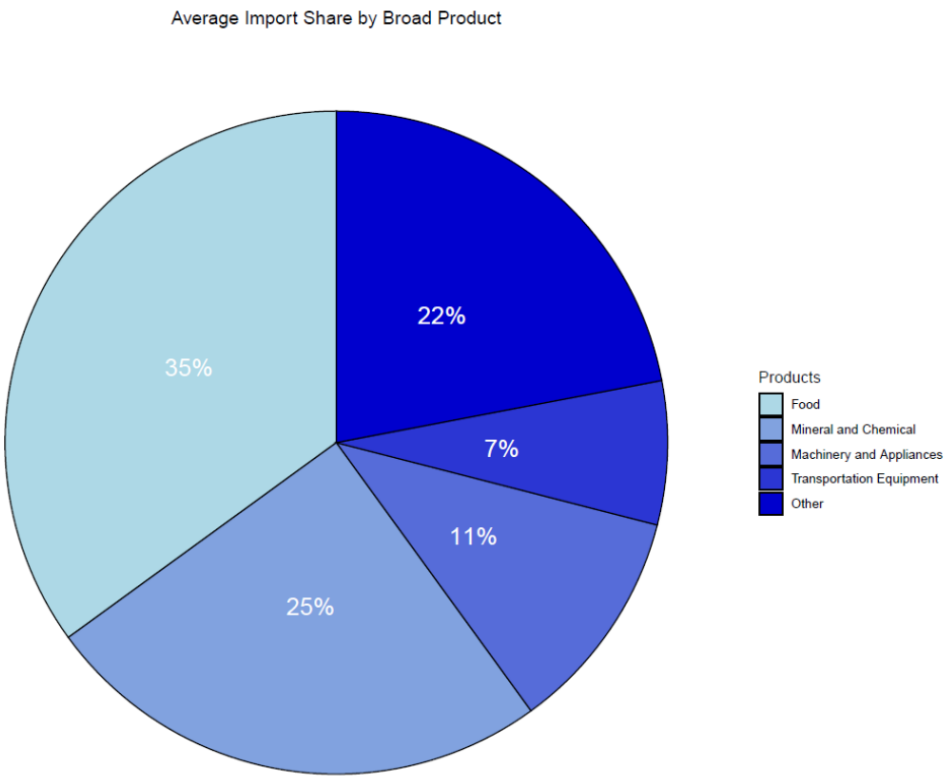


The overall stagnant and downward trends in real wages in all sectors are indicative of the FSM economy's reliance on external grants, including the COFA grants, which have not been fully indexed for inflation and thus have not generally been able to support higher real wages over the time period.

1.2.3 Consumption

While household consumption data is not available, several inferences can be made from an examination of detailed import data. Figure 1.14 shows the average share breakdown of major import categories from 2015-2022. As shown there, the sections of the Harmonized Schedule (HS) associated with food products (Section I-IV) account for over one third of all FSM imports. These are followed closely by Mineral (Section V) and Chemical (Section VI) products which include fuels, fertilizers and pharmaceuticals. Together, these six sections, which comprise nearly all consumables, accounted for 60% of FSM imports. Other major products include capital goods like machinery and appliances (Section XVI) and transportation equipment (Section XVII). While the household breakdown of these imports is unavailable, given the large share of government expenditure on capital goods, it is likely that household consumption is heavily dominated by food products, purchased via wholesale and retail establishments.

Figure 1.14



1.3 Fiscal Policy 2004-2023

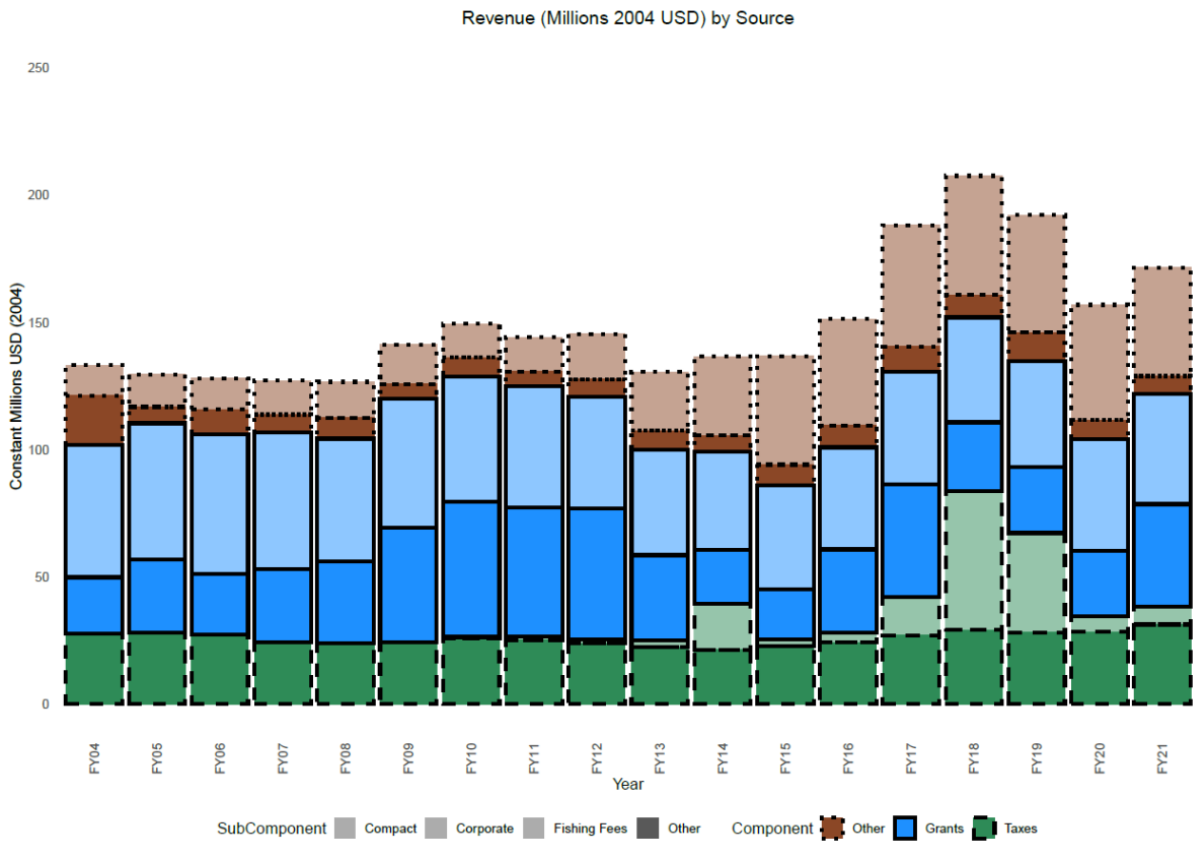
Due to the large share, and consistent amount, of external financing, the FSM largely experienced stable finances overall from FY2004-FY2022, typically running positive primary and overall fiscal balances. However, the FSM national government

experienced greater volatility due to substantially fluctuating revenues, especially in the latter years of the period, due to increased fluctuation in non-resident corporate tax receipts and fishing licensing fees, although this volatility largely contributed to years of extreme fiscal surplus. These income sources, along with the external grant assistance, have enabled the FSM to maintain relatively low rates of taxation on household wage income as well as on consumption. The state governments experienced less fiscal volatility, but also smaller fiscal margins with operating balances just in surplus or deficit.

1.3.1 Revenue

As shown in Figure 1.15, grants (blues with the solid border) form the bulk of government revenues in the first 10 years of the Amended Compact period, averaging over 60% of revenues from 2004 to 2013, with Compact grants (light blue) forming the majority of this. During this period constant price revenues were also exceedingly stable, with average annual volatility of less than $9 million. However, from 2014, local revenues overtake grants as the primary source of funding. This development is

Figure 1.15



primarily driven by sustained increases in other revenues (brown with dotted border) from fish license fees (light brown), which increase from an average of constant price (2004) value of $14 million from 2004 to 2013, to an average value of $43 million from 2014 to 2021, and by increased, but highly volatile, tax receipts (green with dashed

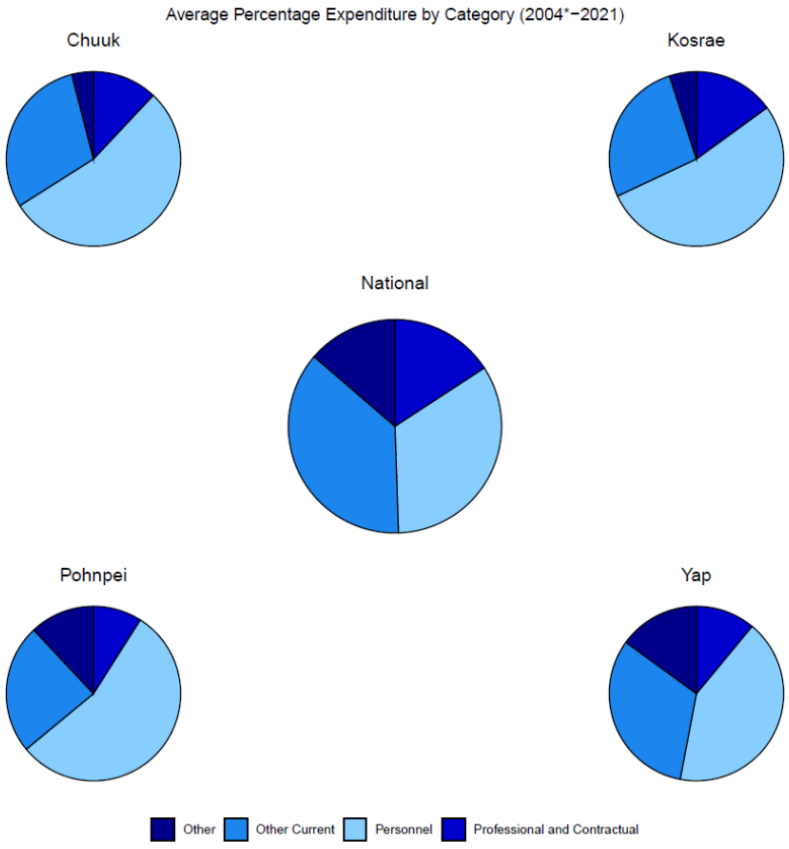
border), especially corporate tax receipts (light green). This latter source contributed nothing to revenues from 2004 to 2007, and less than $3 million in constant price (2004 USD) revenue through 2013. Starting in 2014, these revenues began to oscillate wildly between a constant price low of $2.7 million in FY2015 and a high of $54.7 million in 2018, when overall government revenues peaked at almost $210 million.

These volatile corporate tax receipts are largely driven by a 2005 law which permitted foreign companies to establish an overseas domicile in the FSM. This law has attracted primarily Japanese corporations, especially captive insurance companies, who have utilized the FSM jurisdiction for declaration of certain incomes, including capital gains. This has resulted in several large, one-off, receipts that have ranged from between 10 and 30 percent of total FSM revenues. These revenues are volatile and subject to risk both from international tax compliance efforts and scrutiny by Japanese domestic lawmakers. Since 2014, when both fishing license and corporate tax revenue began to increase, the FSM consolidated government finances have run significant overall fiscal balance surpluses, significant portions of which have been directed to a government owned trust fund. Notably, other domestic taxes account for less than 25% of all government revenues, a share that further decreased in the latter years of the period.

1.3.2 Expenditure and Fiscal Balance

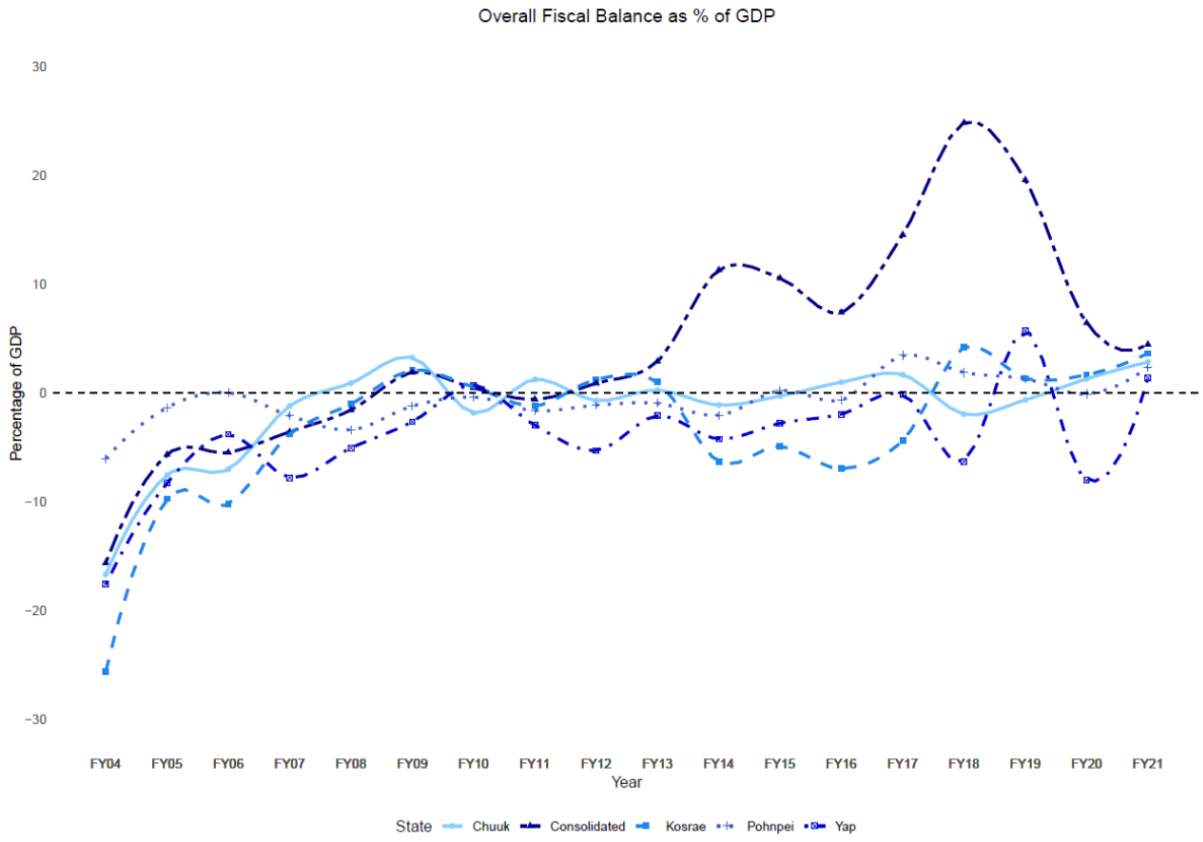
At a broad level, government expenditure funds personnel, current expenditures

Figure 1.16



(including both consumables and fixed assets), public infrastructure expenditure, and other expenditures including interest payments, inter-government grants, subsidies and other miscellaneous expenses. As shown in Figure 1.16, personnel and current expenditure were the two largest expenditure categories in all five FSM governments from 2004 to 2021[1]. In Chuuk, Kosrae and Pohnpei, personnel expenditures exceeded 50% of all government expenditures on average over the period. In Yap and in the National government, personnel expenditures were less than half, and for the National government they were a smaller expenditure category (32%) than other current expenditures (35%).

Figure 1.17



While the FSM consolidated government finances do not record expenditure on public infrastructure separately, such expenditure is captured as part of Professional and Contractual expenditure, along with other non-public infrastructure related contractual expenditure. As such, this expenditure category represents a ceiling of public infrastructure expenditure. The category is of a relatively comparable size across the five governments, ranging from 9% of expenditure in Pohnpei to 15% in Kosrae and the National Government. Expenditure at this level would be at the lower end for countries at similar income levels and the finances suggest that this expenditure is almost

[1] Chuuk State and the FSM National Government did not record detailed current expenditures from 2004 to 2008, and thus their figures reflect averages from 2009 to 2021.

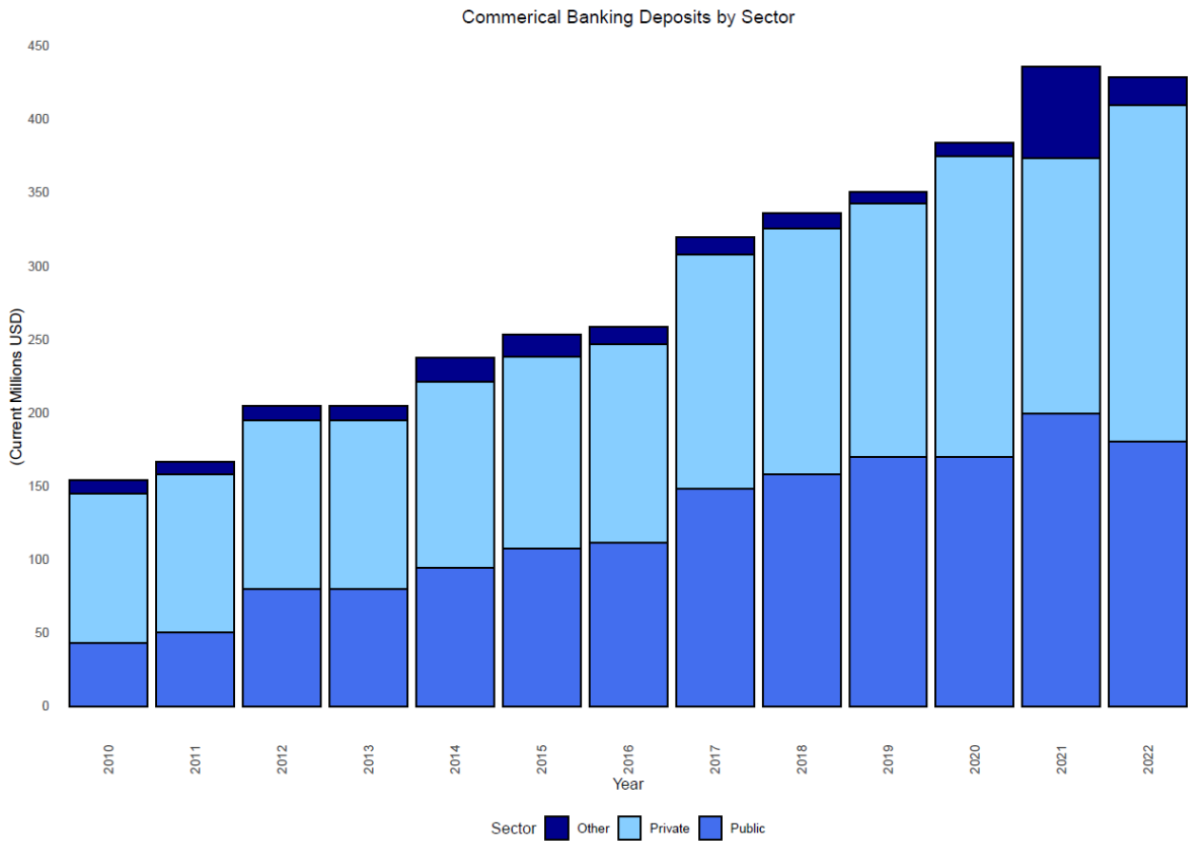
entirely financed by grant revenue, particularly the COFA public infrastructure grant, rather than any additional local revenues.

In terms of fiscal balance, as shown in Figure 1.17, most states experienced significant fiscal distress caused by the transition to the 2004 Amended Compact, before seeing government finances stabilize in the latter portion of the period. However, many governments continued to experience overall fiscal balance deficits, with state governments in overall fiscal balance deficit in 65% of the years between FY2004 and FY2021. However, a law passed in 2023 to distribute fishing fee revenues to the states is likely to alleviate this fiscal pressure at the state level and lessen the need for transfers from the federal government to the state governments. The overall consolidated fiscal balance of all five governments was positive from FY2012 and averaged over 12% of GDP from FY2014 to FY2021, reflecting considerable fiscal space across the FSM in the latter period the Amended Compact.

1.4 Financial Sector

Backed by the US Federal Deposit Insurance Corporation, the banking system in the FSM is stable and dominated by a duopoly of institutions. The deposit base is large, at roughly 100% of GDP. As shown in Figure 1.18, the majority of deposits are from private

Figure 1.18



sector entities, although the public sector share has grown from under 30% in FY2010

to over 40% by FY2022. FSM commercial banks engage in little domestic lending, either commercial or consumer, with domestic loans at just over 10% of deposits. Domestic lending is limited by several constraints, especially the difficulty in securing collateral for loans. As non-FSM citizens, and entities comprised thereof, are legally barred from taking title to FSM real estate, the banks are generally unable to secure loans against real property. As such, private lending is sparse and, when it does occur, carries a significant premium, of historically between 200 to 500 basis points vis-à-vis lending rates in other Pacific Island developing states.

1.5 Trust Funds

An important component of the FSM's long-run macroeconomic overview is the presence of two sovereign trust funds, one "Compact Trust Fund" (CTF) under the COFA and another fully Domestic Trust Fund (DTF). Additionally, several states have small trust funds. These funds have been established to support the long-term fiscal viability of the FSM governments. The CTF is intended to provide a replacement for direct economic assistance under the COFA, while the DTF is intended to further long-term financial autonomy and support the provision and maintenance of social and economic infrastructure. These trust funds place the FSM governments on a solid long-term fiscal footing.

1.5.1 Compact Trust Fund

The Compact Trust Fund (CTF) was established in FY2004, but initial contributions were not made until FY2005. While originally envisioned to provide distributions at the end of the FY2004-FY2023 period, as part of the renewed COFA the need for distributions to replace COFA sector grants was delayed and the CTF was further supplemented with $500 million dollars in funding. While the 2023 Compact Trust Fund Agreement (CTFA) does permit limited disbursements in the FY2024-FY2043 period, these are restricted to distributions necessary to provide inflation adjustment for the COFA Sector Grants, provide for "resiliency" needs in the infrastructure and environment sectors or for "special needs" of a one-off nature. The CTF is governed by the Compact Trust Fund Committee (CTFC) which is comprised of three members from the FSM government and three members from the United States government.

1.5.1.1 Historical Performance

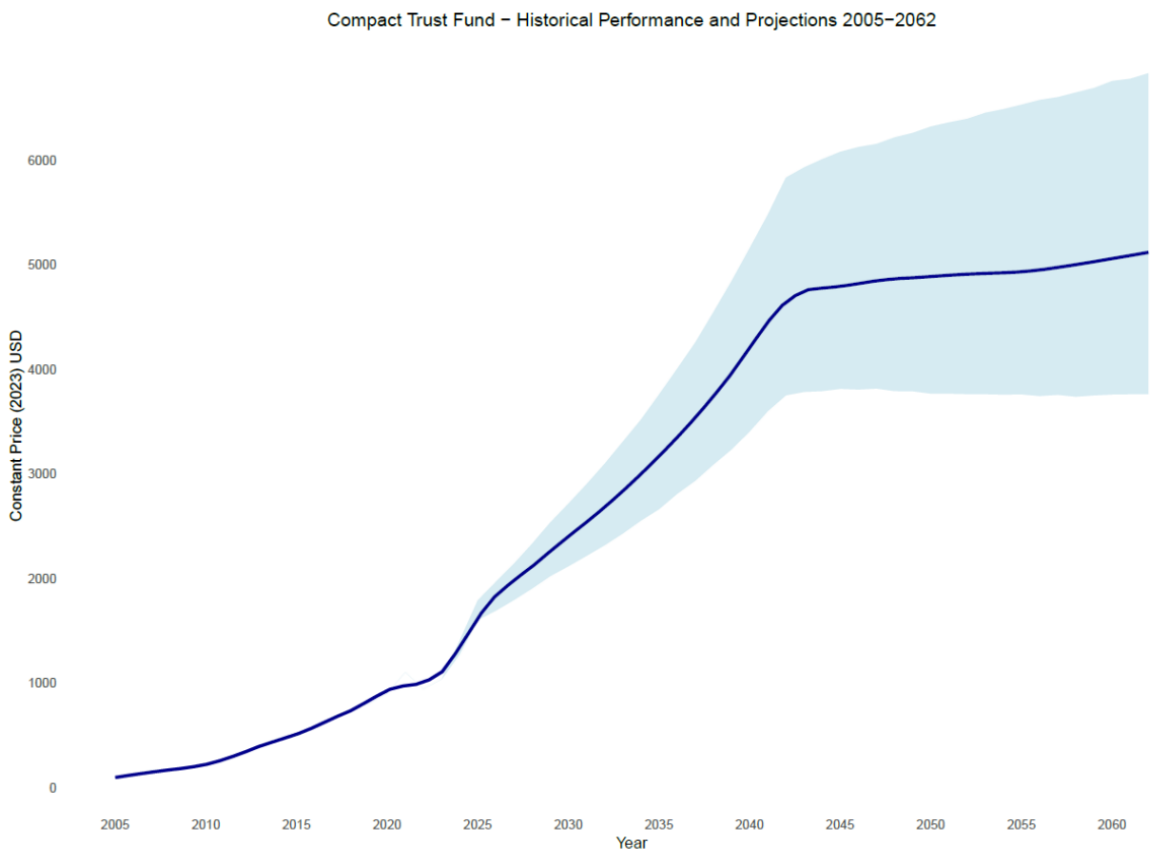
Due to delayed initial contributions, and overly-optimistic growth expectations, the CTF did not perform as initially envisioned. The CTF was initially expected to achieve a corpus value of $1.8 billion by FY2023. However, as early as FY2011, the FSM government and others warned that the CTF was likely to significantly underperform these expectations. The FSM government's 5-year review of the Amended Compact, published in 2011, projected that, under plausible investment assumptions, the CTF

would achieve a nominal FY2023 terminal value of the CTF of $985 million, close to the actual FY2023 final value of $1,036.

1.5.1.2 Projections

The CTF is projected to continue to grow throughout the FY2024-FY2043 period to a real value of $4.7 billion (constant 2023 USD), a corpus size that will sustain regular distributions at, or in excess of, the $140 million in COFA Sector Grants (constant 2023 USD) from FY2044. Figure 1.19 projects the CTF using modelling assumptions based on historic performance of the CTFs asset class allocations and including annual distributions from FY2024-FY2043 for full inflation adjustment of the COFA's $140 million in Sector Grants. Notably, these CTF projections do not include any distributions under the 2023 CTFAs "resiliency" or "special needs" mechanisms. These distributions, of up to four and two percent of the CTF corpus, respectively, would undermine the ability of the CTF to replace the COFA Sector Grants from FY2044, although limited distributions in these categories may be consistent with the long-term objective of replacing the COFA Sector Grants.

Figure 1.19

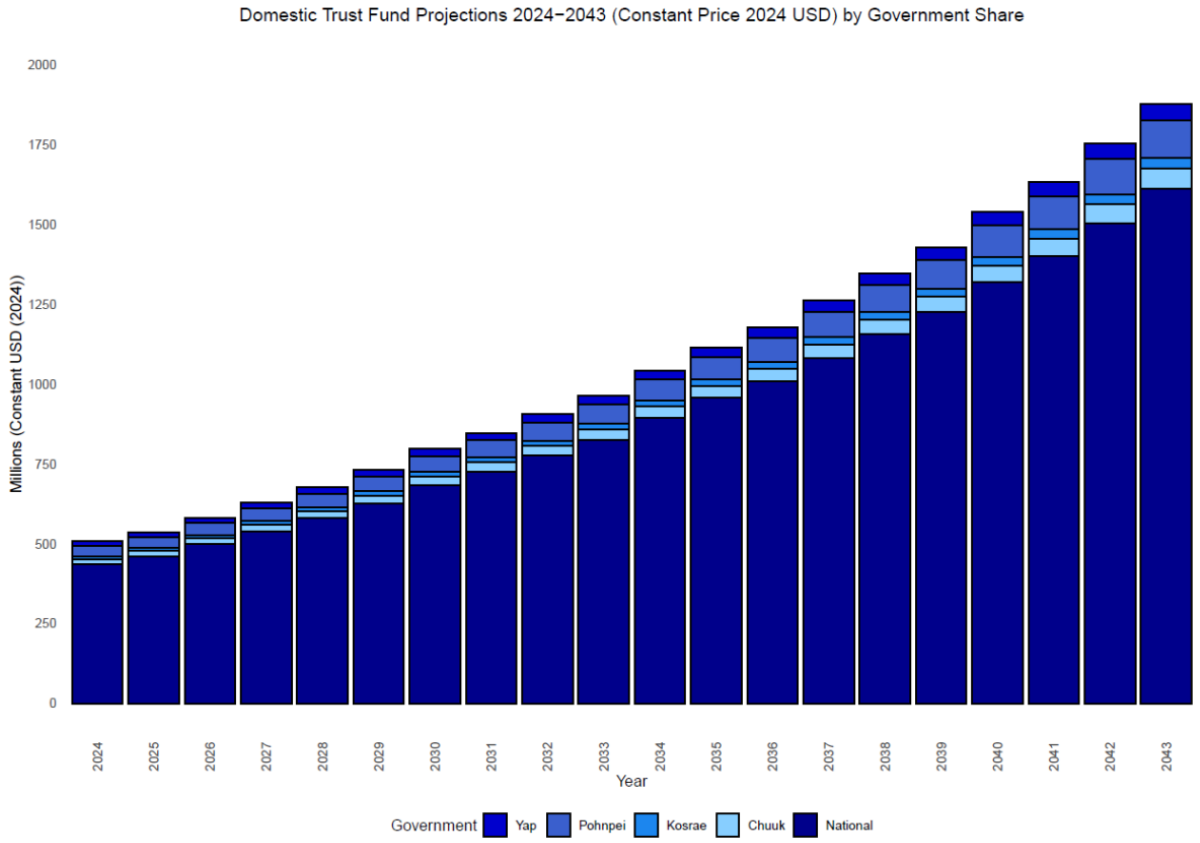


1.5.2 FSM Domestic Trust Fund

In 1997, the FSM established a Domestic Trust Fund (DTF) to contribute to the long-term financial viability of the FSM. However, contributions to the fund were not made until

2015. While the DTF is primarily an instrument of the National government, each of the State governments also have smaller subaccounts as “other participating governments. As of July of 2024, the FSM Trust Fund contained total assets of $507.5 million, with the bulk of these (86%) being assets of the National Government.

Figure 1.20



1.5.2.1 Projections

Following the same modelling assumption as the CTF, but assuming no distributions or additional contributions from FY2024 to FY2043, the DTF is projected to achieve a constant price (2024) value of $1.9 billion by the end of FY2043, with the share breakdown by government shown in Figure 1.20. This DTF will be able to provide up to an additional $80 million (2024 constant price) in distributions to support the FSMs governments finances. Combined, the Compact and Domestic trust funds will be able to support constant price (2024) distributions of between $200 to $300 million by FY2044, well in excess of the $140 million provided by the COFA Sector Grants, and closer to the combined value of the COFA Sector Grants and the current revenues from Fishing License Fees. These Trust Funds provide the FSM with a very solid long-term fiscal foundation and provide the FSM with the ability to fully utilize any excess fiscal space over the next 20 years.

1.6 Growth Models and Projections 2024-2043

The economic overview above presents an economy that, while showing strong fiscal health from a combination of foreign grants and domestic revenues, has struggled to achieve even modest real economic growth over the past 20 years. While the grants and local revenues provide a strong fiscal base for the FSM governments, they also distort the private sector which primarily facilitates the consumption of imported goods purchased with extraordinary non-tax revenues. These revenues also support a significant public-sector wage premium, which constrains both the availability and the quality of the private sector labor market. Looking forward, given the 2023 COFA grants and the CTF and DTF, the FSM is well positioned to maintain a stable economy at current or even increased levels of government fiscal support, i.e. maintain the status quo. Economic growth would need to be primed by another source.

1.6.1 MIRAB

Several observers have noted that the FSM economy can best be described as an economy based on Migration, Remittances, Aid and Bureaucracy (MIRAB). This is effectively the FSM economic status quo, and one that is predicated on a domestic demand economy that is primarily supported by a government bureaucracy funded via significant non-domestic revenues. Growth in a MIRAB economy is predicted by increasing government revenues. While the FSM has increased its non-COFA grant assistance in recent years, it is unlikely that there is substantial scope for additional grant assistance from non-US development partners as many international funders decrease the availability of grants and concessional loans as income levels increase, meaning that relying on increasing grant funding for further economic growth is not a viable prospect. Scope for growth does exist, however, via increased personal remittances via the Micronesian diaspora. Under the COFA, FSM citizens are permitted to live and work in the United States, and indeed the country has experienced substantial out-migration over the past 20 years. The FSM has averaged personal remittances of between 6% and 7% since FY2009. Given the size of the FSM diaspora and the US-FSM wage differential, it is plausible that the FSM could see increased personal remittances over the next 20 years. At the extreme end, other small island countries like Samoa, the Bahamas and, in recent years, Vanuatu see remittances in the range of 15-20% of GDP. FSM remittances at this level would increase household consumption and also improve the collection of indirect domestic taxes. Remittances could also further private investment.

A MIRAB economy ultimately faces bounds on growth potential due to the fact that it is largely dependent on external transfers to finance bureaucracy and household consumption. Moreover, external transfers can introduce pro-cyclical volatility, as aid and remittance flows tend to follow global macroeconomic cycles. While a substantial portion of the FSM's grants are highly stable under the 20-year mandatory appropriations of the COFA Sector Grants, grants from other donors and remittances

are potential sources of pro-cyclical economic volatility. While a MIRAB model has modest growth potential in the FSM, an economy structured in this way is unlikely to achieve the upper range of upper middle income or high-income status.

1.6.2 Goods Based

Remoteness, limited capital and labor, inadequate economic infrastructure, and restrictive foreign direct investment and other regulatory policies have all contributed to the limited tradable goods production in the FSM over the past twenty years. While the FSM is not party to the World Trade Organization (WTO), it does have highly preferential access to the United States' market via special status of General Note 10 of the US Harmonized Tariff Schedule. While this note gives the FSM duty-free market access in almost all products, it includes notable limitations for prepared Tuna and Skipjack, textiles, and some agricultural products. As these products are those in which the FSM might have comparative advantage in goods production, and indeed have propelled growth in other insular economies including American Samoa and the Commonwealth of the Northern Marinas Islands, the General Note 10 market access is not as consequential as it might first appear.

That said, there is scope for expanding production of tradable goods, especially in specialty agriculture and aquaculture products as well as in processed marine products. While a number of private and public enterprises have attempted to enter these markets since the beginning of the Compact in 1986, most have been unable to find sustained commercial success. Several factors have contributed, including the tight labor market, transportation difficulties, and instances where public enterprises have entered the market as direct competitors to private firms. Foreign direct investment (FDI) in tradable production has been negligible, hindered by restrictive land tenure and joint venture policies. These hinderances have prevented private, and even public, producers from achieving the scale necessary to be globally competitive, even in the products wherein the FSM might have underlying comparative advantage.

As manufacturing exports constitute less than 1% of all FSM exports, well below the Pacific Island's average of 15-20%, there is some scope for growth in exported goods production compared to economies which face similar goods production constraints. While there is also some scope for increased tradable production and import substitution in foodstuffs, such activity would require commercial scaling of what is largely household or subsistence level production as well as a significant shift in FSM consumer tastes and preferences.

Ultimately, the FSM does have scope for growth based on increased tradable goods production. Pursuing such a growth model would require the country to attract significant private investment, take advantage of its market access opportunities in the United States, and pursue market access via WTO membership or other regional or

bilateral market access agreements like the EU-Pacific Economic Partnership Agreement (EPA), or with other key markets like Japan or the People's Republic of China. Given the small overall size of the FSM, even modest increases in tradable goods production could lead to noticeably improved economic performance.

1.6.3 Internationally Traded Services

Over the past 20 years, international trade in services has nearly doubled, with global service exports valued at roughly $7 trillion in 2022. Service exports consist primarily of business services, and travel and tourism related services. Export of travel and tourism services has long been identified as a potential driver for growth in the FSM. With its outstanding natural beauty and relative proximity to major tourist markets including East Asia, Australia, and the West Coast of the United States, the FSM has considerable potential to expand its export of travel and tourism-related services. To date, the FSM has not fully realized this potential due to several factors. International commercial air service has historically been dominated by a single incumbent carrier, resulting in non-competitive commercial airfares. Additionally, the incumbent carrier's flights originate or transit US territory, introducing a transit-visa barrier for many foreign nationals. Direct flight connections to non-US destinations have been infrequent and erratic, and there are no regularly scheduled direct flight connections to major East Asian or Australian markets. Beyond this, similar issues to those that have hindered at-scale investment in tradable goods production also hinder the development of facilities and amenities that would support internationally-competitive exports of travel and tourism related services. Existing hotel facilities are generally of small scale, often are not of international tourist standard, and are challenged by private sector labor market shortages.

In addition to travel and tourism-related services, over the past 20 years, development in information and communications technology (ICT) has also given rise to increased trade in business services. These services range from relatively low-skilled activities like call center operations, to trade in financial, legal and other professional services. Improvements in the FSM's ICT capability, both via undersea and satellite connectivity, provide an opening for an expansion of exported business services, although other issues such as unreliable power grids and broader investment restrictions still undermine the full potential in this sector. Some of the activity surrounding the FSM's captive insurance domicile is considered to be traded international service, and in 2018, the FSM exported over $95 million in services, of which roughly $60 million was related to services provided for non-resident corporations. These specific activities have considerable volatility and are largely related to one-off decisions made by individual firms, rather than a source of recurring activity.

The expansion of both travel and tourism and business services offers an additional growth pathway for the FSM. The Maldives, Vanuatu, Samoa, and Palau all have

substantially larger exports of travel and tourism services, despite being similarly sized and facing similar challenges of remoteness. To expand into high value-added business services, the FSM would need to ensure a high-skilled workforce and reliable economic infrastructure, particularly ICT and energy.

1.6.4 Climate Change

The economic impacts of anthropogenic climate change on the FSM economy were not substantial from FY2003-FY2024. However, climate modelling suggests that the FSM will face increasing disruption from climate change in the next 20 years, including land inundation, more frequent and violent storms, and sustained periods of drought. Of the growth models described above, these changes could threaten expanded production of tradable goods, particularly agriculture, aquaculture and offshore fisheries. Climate change also threatens the potential of tradable services via increased threat to the economic infrastructure needed to support these activities or due to a decrease in the amenity of the FSM's natural environment in serving as an international tourist destination.

1.6.5 Growth Projections

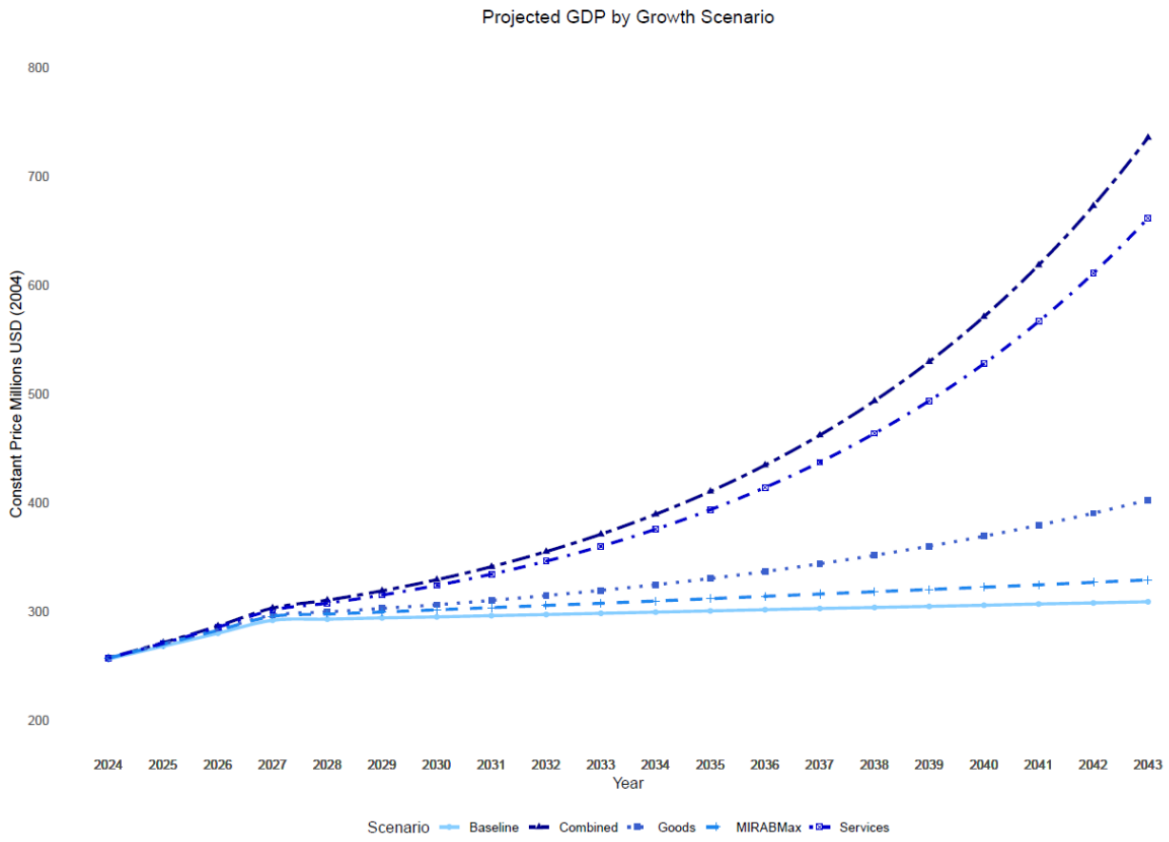
Using a calibrated macroeconomic growth model described in the appendix, Figure 1.21 illustrates different growth paths based on the different growth models described above. Five potential scenarios are simulated: a "Baseline" scenario which models performance based on continuation of the MIRAB economic model; a "MIRAB Max" scenario which models performance based on increased levels of remittances but otherwise a continuation of the MIRAB economic structure; a "Tradable Goods" scenario which contemplates the growth from increased production in tradable goods; a "Tradable Services" scenario which focuses on growth from an increase in production of exported tradable services; and a "Combined" scenario which incorporates the growth gains from MIRAB Max, and expanded production in tradable goods and services. These scenarios make different assumptions on the levels of policy reforms enacted to overcome the hurdles described to expanding private sector production of goods and services along with the growth potential of each type of production. They also include a fiscal boost from the increased COFA Sector Grant assistance. Due to issues of absorbative capacity, the fiscal boost is scaled in from FY2025 to FY2027.

Baseline

The baseline growth scenario assumes full implementation of the 2023 COFA Sector Grants, but no further fiscal boost or productivity gains as a result of policy reform. Under this scenario, it is assumed that no distributions are taken from the CTF from FY2024 to FY2043. Under this scenario, the main growth comes from the adjustment to increased COFA sector grant amounts in the early years of the period. While growth might plausibly average 4-5% during the adjustment period, without other types of

investment or reform, growth rates are likely to largely return to what was witnessed over the previous 20 years. This leaves the FSM in only a marginally better position in FY2043 with a mean simulated real GDP in that year of approximately $309 million (2004 Constant USD).

Figure 1.21



MIRAB Max

The MIRAB Max growth scenario maintains most of the same assumptions of the baseline scenario but allows for slightly increased private investment as a result of increased remittances. No other public investments or policy reforms are assumed. Under this scenario, the FSM fares slightly better than the baseline, obtaining a constant price GDP of $330 million by FY2043.

Goods

This scenario contemplates growth driven by increased production of tradable goods. This increased goods production comes about not only via increased public investment in key public infrastructure, but also through labor market effects that improve both productivity and the labor supply. This increased investment in both human and physical capital would lead to a markedly better outcome, with an average real GDP growth rate over the 20-year period of 2.3%, inclusive of the COFA Sector Grant fiscal boost, and a FY2043 real GDP of $403 million, an increase of over 50% over the period.

This growth would move the FSM solidly into the (lower end) of the World Bank's upper-middle income bracket.

Services

The services scenario encapsulates increasingly improved productivity, resulting from FSM institutional and regulatory reform that facilitates the expansion of the production of tradable services in addition to investments in public infrastructure and human capital. These measures might consist of fiscal reforms including tax reform, investment and trade reform, judicial reform, or other regulatory reform. This scenario assumes that these reforms would be carried out incrementally over the 20-year period. Estimates of FSM total factor productivity (TFP) place the FSM in the bottom 5th percentile of all developing countries. This scenario assumes an improvement to the median range of developing country TFP. This scenario further assumes that these reforms would not only improve the productivity of existing factors of production but would also attract the non-aid investment needed for scaled production of tradable services. Under these assumptions, performance is considerably better than the earlier scenarios. The simulated average real GDP growth rate is nearly 5% over the 20-year period and achieving real GDP in FY2043 of $660 million (2004 constant), a 150% increase that would put the FSM squarely in the middle of the upper-middle income bracket.

Combined

The final scenario envisions the combined effects of growth in remittances, goods and services. In addition to the investment and reform assumptions made above, this scenario also envisions the FSM pursuing additional market access agreements which would further attract investment and enhance productivity. The assumptions yield the best performance of any scenario, with an average real GDP growth rate of 5.5%, leading to an estimated real GDP of $735 million in FY2043, an increase of 185% over the period. This is an optimistic scenario which envisions the FSM performing at the upper end of its economic potential over the 20-year period through a combination of increased resources, institutional reform, and tax and trade incentives for investment.

1.7 Conclusions

The FSM economy largely stagnated over the previous 20 years, although the latter years began to see a small growth trend, albeit interrupted by the COVID-19 pandemic. As a small, remote, economy, the FSM faces a number of extraordinary challenges to sustained economic growth. One of the key drags on growth over the past 20 years was the fiscal drag created by decrementing COFA Sector Grant assistance and the fiscal uncertainty regarding the end of the FY2004-FY2023 Amended Compact period as a result of the under-funded Compact Trust Fund. As a result, even as domestic revenues expanded substantially from 2014, the FSM government adopted a very conservative

fiscal policy and largely saved excess revenues in anticipation of non-continuation of the COFA Sector Grant funding and an underfunded CTF.

With the securing of an additional 20 years of COFA Sector Grant assistance, at an elevated level, and an additional $500 million contribution to the CTF as well as a well-funded Domestic Trust Fund, the FSM has a very firm fiscal footing for the next 20 years and beyond. Assuming the trust funds are properly managed, and barring any wildly unprecedented negative market returns, the trust funds should provide real income in perpetuity from FY2044 significantly in excess of the $140 million in COFA Sector Grant assistance. Given this fiscal security, the FSM is well placed to adopt a more aggressive fiscal policy stance over the coming 20 years.

While the COFA and trust funds provide the FSM with long term fiscal security at a baseline, on their own these revenues are not sufficient to generate economic growth. While the FSM has limited room for growth under its current MIRAB growth model, primarily through an increase in remittances from the FSM diasporas in the United States and elsewhere, sustained economic growth will require a significant restructuring of the economy around private sector production of tradable goods and services. The security of the COFA and trust funds provides the FSM governments with the fiscal space necessary to make the needed investments in physical and human capital. Additional fiscal space could also potentially be employed to provide infant-industry support to private sector goods and services firms. Such support also entails ensuring the absence of industrial policies which promote public enterprises as substitutes or competitors to private sector firms. Significant private sector growth is also likely to require significant regulatory and policy reform. Ultimately, the FSM economy has the potential to achieve growth to propel it well into upper-middle income status over the next 20 years.

Appendix 1: GDP Modelling

Modelling Approach and Assumptions

To project long term GDP growth, the modelling relies heavily on Dalgaard & Hansen (D&H)[2] who modify a classic constant elasticity of substitution (CES) Cobb-Douglass approach to incorporate investment in aid-financed capital, or "aid-capital". The assumption underlying this approach is that the marginal productivity of aid-financed capital might differ from that of domestic capital and thus needs be accounted for separately when identifying growth effects in developing countries. D&H derive an observable growth accounting equation, shown below, which includes parameters for the marginal productivities of both types of capital, labor and capital shares in output, change over time in schooling, the Mincerian return to schooling[3], the growth rate of the labor force, capital depreciation rates, and a country-time specific error term. This error term captures measurement error in the econometric estimates, but also includes a residual which represents the country-time specific total factor productivity (TFP). Amongst other things, this TFP-like measure captures the effect of country-specific features including resource endowment, remoteness, and a country's institutional environment.

$$\hat{Y}(t) = \rho^d(t)\left[\frac{I(t)-F(t)}{Y(t)}\right] + \rho^c(t)\left[\frac{F(t)}{Y(t)}\right] + \alpha_l\psi\dot{u}(t) + \alpha_l n(t) + \hat{A}(t) - \alpha_k(\gamma\delta^f + (1-\gamma)\delta^d) + \phi(t)\frac{1}{\beta}(\rho^c(t) - \rho^d(t)) \quad (13)$$

(Dalgaard & Hansen 2017, p. 1003).

In order to simulate return paths for the FSM GDP growth rate, the model is calibrated using parameters from D&H's econometric estimates and FSM historical data in order to estimate the FSM-specific error term. The parameters are calibrated using Monte Carlo simulations based on the first and second moments of each of the parameters. The mean growth rate, (Y(t)), foreign aid inflows ((F(t)), and labor growth rate (n(t)) are all calculated from FSM statistics.[4] The marginal returns on capital ($p^d(t)$ and $p^c(t)$), the average elasticities of output with respect to labor input (α_l), and the Mincerian return to education ψ(t) are all calibrated using a meta-average of the econometric estimates in D&H. In the absence of FSM data, the increase in years of schooling, (u(t)), and non-aid investment, (I(t))[5], and the depreciation rate of both types of capital, δ, is calibrated

[2] Dalgaard & Hansen (2017).
[3] Patrinos (2016).
[4] FSM National Accounts (2018), author's calculations.
[5] While the mean of this measure (0.21) seems somewhat high as an estimate for the FSM, this value is nearly identical for the RMI (for whom data is available) and as the RMI also seems the most appropriate comparison case this value is used.

from the first and second moments from the raw D&H data. As the granularity of FSM aid data allows identification of the types of aid, the share of aid investment (as a ratio of total aid), β, is set to 1 as complete identification of aid investment is possible. 10,000 Monte Carlo draws of these parameters are simulated and used to solve for ϕ(t), which, again, can be thought of as a TFP-like parameter. Simulating this error term for the FSM puts it roughly in the 5th percentile of developing countries, between Liberia and Tajikistan. As this parameter effectively captures the FSM growth potential this estimate appears plausible when comparing to other metrics such as now discontinued World Bank Ease of Doing Business Indicator (EDBI) where the FSM falls in the 20th percentile (rank 158), which is also between Liberia (rank 175) and Tajikistan (106). That the percentile score for ϕ(t) is worse than for the EDBI is also plausible as the latter focuses solely on the regulatory environment while the former would also capture things like geographic remoteness and natural resource endowment.

With simulations of ϕ(t) for the FSM, it is then possible simulate the real growth rate, Y(t), using calibrated or assumption-modified parameters for different growth scenarios.