Curbing US Corruption Through the Budget Process

Working Paper for European Centre for Political Research General Conference 2025

26 August 2025

Abstract. — *Can the budget process be used to curb corruption more effectively?* To answer the question this paper draws on innovative methods to estimate the costs of corruption and other efficiency losses using a fiscal space framework and applies them to the United States as a country test case. The hypothesis is that presenting anti-corruption as a source of fiscal space may help policymakers address corruption more systematically through the budget process. To draw out the hypothesis, the paper begins with systematic literature reviews on US corruption and the definition of corruption, then updates key concepts and introduces both traditional and novel metrics for measuring corruption within the budget cycle.

By analysing where and how corruption occurs – across economic classifications, government sectors, functions, and throughout the public finance system ("Follow-The-Money Corruption Cycle") – the paper quantifies these losses and benchmarks them against G20 countries. The findings reveal the United States loses approximately $1.4 trillion each year to corruption and inefficiency, with the greatest losses in Social Protection ($349 billion, 1.50% of GDP) and Health ($346 billion, 1.47% of GDP). State government losses ($592 billion, 2.52% of GDP) slightly exceed central government losses ($571 billion, 2.45% of GDP).

Four Fiscal Space scenarios are modelled. The baseline scenario, which excludes increased taxation or debt and limits third-party funding, finds efficiency improvements as the only major source of fiscal space ($1.4 trillion or 5.9% of GDP). In a more expansive scenario, fiscal space could rise to $4.7 trillion (20% of GDP) if tax rates, NATO targets, and public debt thresholds are increased, though at much higher risk.

The study finds declining reliability in the US federal budget since 2000, indicating growing institutionalized corruption, political manoeuvring and weakened performance and policy-based decision-making. Additional analysis covers government functions and spending patterns, highlighting persistent borrowing for current expenditures, including corruption and political manoeuvres. Further research will refine metrics and reconciliations as the method is piloted in other countries, with future papers to focus on policy responses and reforms.

Data model available at: https://artificialfiscalintelligence.com/usa_fis

SLR tool available at: https://artificialfiscalintelligence.com/slr-corruption-usa-definition

Full paper available at: https://artificialfiscalintelligence.com/wp-content/uploads/2025/08/Laing-ECPR-2025-Curbing-US-Corruption-through-the-Budget-Process-v1-210825.pdf

Conference slide deck available at: https://artificialfiscalintelligence.com/wp-content/uploads/2025/08/ECPR-2025-Corruption-Inefficiency-and-Fiscal-Space-USA-v1-210825.pptx

Presented at the European Consortium for Political Research General Conference 2025
Panel on Fiscal and Compliance Dimensions 26-28 August 2025

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AI (CoPilot) Summary of Paper:
Curbing US Corruption Through the Budget Process

This comprehensive working paper offers an in-depth analysis of corruption and inefficiency costs within the United States public finance system. Utilizing innovative fiscal intelligence models embedded in a Fiscal Space framework, it quantifies losses due to corruption, political manoeuvring, and inefficiencies, while identifying potential fiscal space opportunities for the US government. The study is grounded in systematic literature reviews and introduces clear definitions distinguishing corruption from political manoeuvring, aiming to enhance policy responses and budgetary reforms.

Introduction and Conceptual Framework

The paper applies two novel frameworks: one to estimate fiscal space across four dimensions—tax, debt, grants (third-party payers), and efficiency—and another to quantify corruption and inefficiency costs in public finance. Corruption is defined as the abuse of power for private gain, contrasted with political manoeuvring, which is the use of power for public interest outcomes. The study leverages publicly available data to build a fiscal intelligence model applicable internationally, with the US as a detailed case study.

Systematic Literature Reviews and Definitions

Two systematic literature reviews (SLRs) underpin the research. The first identifies 511 relevant papers on US corruption across public finance components such as budgeting, procurement, audit, payroll, and revenue. The second review highlights the lack of consensus on defining corruption and the challenge of distinguishing it from legitimate political actions. The paper emphasizes multiple types of efficiency—allocative, distributive, technical, and social—acknowledging that perceptions of efficiency vary with political priorities. A key contribution is the refined definitions separating corruption from political manoeuvring, illustrated by historical examples like President Lincoln's abolition of slavery.

Quantifying Fiscal Space and Corruption Costs in the US

The study estimates that the US loses approximately **$1.4 trillion annually**—about 5.9% of GDP—to corruption, political manoeuvring, and inefficiencies. The largest functional losses occur in Social Protection ($349 billion, 1.5% of GDP) and Health ($346 billion, 1.47% of GDP). State governments incur higher losses ($592 billion, 2.52% of GDP) compared to the federal government ($571 billion, 2.45% of GDP).

Four fiscal space scenarios are explored:

- **Baseline**: No tax or debt increases, limited third-party payers; efficiency gains alone offer $1.4 trillion (5.9% GDP).
- **Increased Debt Threshold**: Raising debt ceiling to 125% of GDP yields an additional one-time fiscal space of $1.5 trillion (6.4% GDP).
- **Tax Increase**: Elevating tax revenue to 25% of GDP through trade policy adds another $1 trillion annually (4.2% GDP).
- **Enhanced Third-Party Payments**: Increasing NATO spending targets to 5% of allied GDP increases aggregate fiscal space to $4.7 trillion (20% GDP), though with associated risks.

The analysis notes political challenges in realizing efficiency gains and tax increases, with debt increases being the easiest yet riskiest fiscal space source. A decline in federal budget reliability since 2000 indicates institutionalized corruption and political manoeuvring embedded in the budget process.

Detailed Fiscal Space Dimensions

Balance Sheet and Liabilities

The US general government exhibits a significant negative net worth of $10 trillion (40% of GDP), primarily driven by federal debt of $25 trillion (90% of GDP). State governments show improving net worth, partially offsetting federal deficits. Compared to G20+5 peers, the US and UK stand out with high liabilities totalling $38 trillion (140% of GDP) at the general government level.

Tax Revenue

US tax revenues have remained stable around 20% of GDP, with tariffs increasing but remaining a minor source. Tax levels align with historical trends and global averages, with Democrats generally favouring tax increases and Republicans demonstrating more volatility. The US ranks among the highest nominal tax collectors but is moderate as a percentage of GDP compared to G20+5 countries.

Grants and Third-Party Payments

Fiscal space from grants and third-party payers, mainly NATO and OECD donor aid, is limited but growing. Notably, NATO allies' increased spending toward a 5% GDP target significantly enhances potential fiscal space, overshadowing aid contributions.

Efficiency and Corruption Losses

Efficiency losses, encompassing corruption and systemic inefficiencies, amount to $1.4 trillion annually. The budget process is the largest source of losses ($533 billion), followed by audit ($407 billion) and balance sheet management ($270 billion). Procurement losses are lower, as corruption often originates earlier in budgeting stages. Among G20+5 countries, the US ranks fifth best in losses relative to government expenditure and GDP, but fourth worst in per capita losses. High-risk areas include procurement, banking, grant systems, and budgeting. The US performs moderately on Anti-Money Laundering and Corruption Perceptions Index metrics but scores well on Open Budget Index, Rule of Law, Statistical Performance, and Worldwide Governance Indicators.

Sectoral and Functional Loss Breakdown

Losses by government sector and function are as follows:

Sector	Loss Amount (USD)	Percentage of GDP
State Governments	$592 billion	2.52%
Central Government	$571 billion	2.45%
Social Security Funds	$320 billion	1.38%

Top functional loss areas include:

- Social Protection: $349 billion
- Health: $346 billion
- General Public Services: $190 billion
- Education: $189 billion

Within state government functions, education, health, economic affairs, and general public services lead in losses.

Efficiency Benchmarking and Fiscal Forecast Volatility

Benchmarking against G20+5 countries reveals the US has high nominal revenues and expenditures but moderate GDP percentages. Efficiency concerns include social protection inefficiencies, declining public order and safety, and challenges in health spending coordination. Fiscal forecasting shows volatility in GDP, inflation, debt, and revenue metrics.

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1. Introduction

This working paper analyses the US general government sector, applying two analytical frameworks from a methodology paper presented at the 2024 ECPR Annual Conference. The paper, "Curbing Corruption Through the Budget Process" (Laing, 2024), explores why policy makers struggle to eliminate corruption through the budget process. It asserts that corruption is a sensitive topic in government and that there are information asymmetries in resource allocation. It is argued that this makes it difficult for corruption to be tackled systematically through the budget process.

The 2024 ECPR paper introduced two novel frameworks to help address these sensitivities and information asymmetries. The first framework establishes a way to measure *fiscal space* in the four point-in-time dimensions defined by Heller (2005). The second framework provides the methodology to *estimate of costs of corruption* and other inefficiencies for any country in the world that has sufficient publicly available fiscal and risk data. The methodology draws from a pre-existing pilot model on corruption and other efficiency losses (Laing, 2023), which also separates twelve different parts of public finance systems under a conceptual framework (Laing, 2020) known as the "follow-the-money" corruption cycle (budget, commitment control, procurement, contract management, verification and payment, audit and oversight, payroll and human resources, accounting, revenue, balance sheet management – assets and liabilities, and accountability institutions) (see Figure 1 on page 93).

Presenting corruption as a source of fiscal space may help incentivize a systematic approach to curbing corruption through the budget process. To do this though, the costs of corruption need to be set in context with other forms of inefficiency as well as other sources of fiscal space. The corruption form of inefficiency should be seen alongside other forms of inefficiency.

This paper presents the data for the US according to the four Heller dimensions of fiscal space of tax, debt, grants or third-party payers and efficiency, with focus on efficiency losses from corruption and other systemic weaknesses within US public finance systems. Pubic data used in the model is provided at Annex A: Sources of Data on page 37.

Novel definitions on what corruption is and what it isn't are also presented to help frame the assessment of the different types of inefficiencies buried within public finance systems and revealed through the estimates methodology. The definitions distinguish corruption and

political manoeuvres. In their simplest form corruption is defined as "the abuse of power", while political manoeuvring is defined as the "use of power". These definitions are elaborated.

This country case study provides an illustration of how the novel frameworks and supporting models using publicly available data can be developed for any country in the world that has sufficient public data. The model is available at: https://artificialfiscalintelligence.com/usa_fis

This paper precedes two related papers currently in development.

The first paper explores a range of reform options aimed at filling revealed systemic gaps to strengthen the capabilities of the budget process to improve the cost-effectiveness of political manoeuvres and reduce corruption and other inefficiencies. These include: legislative (e.g. new laws), administrative (e.g. new rules and processes); and oversight (e.g. new accountability and visibility mechanisms).

The second extends concepts in the current papers to the use of novel fiscal intelligence tools that are built on the use of confidential internal fiscal performance data, rather than publicly available sources used in the existing models – explicitly for use in a budget process. These tools aim to help inform budget decision makers in their efforts to improve efficiency, create fiscal space by targeting corruption and other inefficiencies with the budget cycle, within the context of a highly contested political environment.

This paper is structured around six sections. The first covers systematic literature reviews of corruption in the USA and the definitions of corruption. The second explores the definition of corruption within a budget context. The third reviews the methodology used to estimate fiscal space, including losses caused by corruption, and drivers of other sources of US fiscal space - such as tax policy, third party payers supporting US strategic policy priorities, and deficit financing. The fourth section provides the results including estimates of losses caused by corruption and other efficiency losses within the US general government sector, and provides estimates by the different government sectors (e.g. central and state) and function of government (e.g. health and education). The section drills down into the different sources of fiscal space and inefficiencies within the US public finance systems. It also explores the drivers of risk of corruption and other inefficiencies and the evidence of changes over time. The fifth section provides a discussion on key issues. The final section presents the conclusion focusing on reliability, follow-up research and potential applications.

2. Systematic Literature Reviews

Rapid SLR on Corruption in the USA

The same Systematic Literature Review (SLR) tool that was used in the 2024 ECPR conference paper (Laing, 2024, pp. 4–8) was adopted to assess the scope and nature of corruption literature related to the US (see Figure 1 on page 93). The database was updated from the 2024 version to include additional articles on SCOPUS from the original 2023-24 dataset. It also included the Mathew Stephenson bibliographic dataset (Stephenson and Pozsgai, 2024), where duplicates were removed and gaps detected on what was on SCOPUS.

Of the 45,000 articles on the updated SLR database 511 papers were detected that related to the US. There were 13 papers with more than 100 citations, and 3 over 500. The tagging process is continuing and different options for the use of artificial intelligence (AI) are being tested. The PRISMA 2020 checklist was followed for development of the SLR tool (see Annex B: Systematic Literature Review – PRIMA 2020 Checklist Status on page 38). A summary of the SLR findings is provided at Annex C: SLR on Corruption and the US on page 44.

Through the SLR tool the review found that of the 511 articles, nine of the twelve "follow-the-money corruption cycle" nodes had relevant papers. No papers were detected that contained issues on commitment control, contract management (after procurement), and verification and payment. A summary of these and the ones with the most citations, either total or average annual, are provided at Table 4 on page 98. The SLR tool is available at: https://artificialfiscalintelligence.com/slr-corruption-usa-definition

Rapid SLR on Definitions of Corruption

A rapid SLR was also undertaken into the definition of corruption using the same SLR tool in the previous section. A search for "definition" in all key fields including title, abstract, and keywords resulted in 933 articles being detected (see Figure 3 on page 96). A search on title only detected 54 (see Figure 4 on page 97). The review focused on the highest cited papers and papers from the most published authors (three or more) under the broader search criteria (see Table 4 on page 98). A summary of the broad findings is at Annex D: SLR on Definitions of Corruption on page 52.

The main finding from the SLR is that there is a lack of consensus of what corruption is, and limited research of what it isn't. One of the most cited papers by one of the most published authors on the definitions made the point that research needs to be able to define boundaries between public and private interests (Hao and Johnston, 1995).

3. Defining Corruption for Budget Processes

This section provides an overview of key definitions of efficiency. It also offers definitions of what corruption is and what it is not.

Definitions of Efficiency

There are many different types and definitions of efficiency. The fields of economics, accounting and auditing have different takes.

In economics the key forms of efficiency follow and are all relevant when allocating resources through a budget process:

- *Allocative*: allocating resources to areas that have the biggest impact;
- *Distributive*: ensuring the areas that deliver the biggest impact from resources actually receive resources;
- *Technical/productive/operational:* means essentially that when money does get spent, it gets spent at the lowest cost for a given quality or standard;
- *Pareto/economic*: the state in the economy where no one can be made better off without someone else being made worse off;
- *Dynamic*: is technical efficiency achieved over time; and
- *Social*: a form of efficiency achieved when taking negative and positive externalities (costs not included in market prices) into account. (Bannock, 2003, pp. 111, 134, 359).

Allocative and distributive efficiency are strongly influenced by politics, especially in budgeting. Efficiency measures often shift with changes in government and policy priorities. As a result, different governments may define efficiency differently—such as one viewing immigration facilitation as efficient while another considers strict immigration controls efficient.

Accountants take a slightly different view of efficiency, which define corruption as the "productivity of a company's assets" (Conrad, 2025), and "measures the level of performance achieved against a standard" (Bragg, 2024). This is akin to the economist's technical efficiency.

Auditors have efficiency incorporated with the Value for Money (VfM) framework where economy, efficiency, effectiveness are measured. Auditors define economy as "the optimal use of resources in the public body", akin to the economist's allocative and distributive forms of efficiency. Efficiency here measures "the extent to which the quantity and the quality of

service offered are based on the lowest cost possible", akin to the economist's technical efficiency. Effectiveness is measured to be "the extent to which outcomes are achieved based on the resources used", akin to the economist's distributional efficiency (Benamraoui et al., 2024, tbl. 2)

Novel definitions on what corruption is and what it is not, were created to help frame the assessment of the different types of inefficiencies buried within public finance systems and revealed through the estimates methodology. The definitions distinguish corruption and political manoeuvres and build on additional research recommended on "gaining a deeper understanding of the differences between political manoeuvres and corruption" (Laing, 2024, p. 29).

Definitions of What Corruption Is and Isn't

Building on these works this paper offers new definitions of what corruption is and what it isn't. This is not as an attempt to find a consensus, but to find a means to deal with the sensitivity issue within government and the budget process.

In a budget process aimed at tackling inefficiency in all its forms – whether from corruption, costly political moves, poor policy, mismanagement, inconsistent administration, or incompetence – it is essential for policymakers to understand what causes inefficiency. Clear definitions of corrupt and political behaviours are also important to enable open discussion on funding, policy effectiveness, and resource allocation.

The papers on definition raised in the previous section disentangle the different forms of corruption be it legal or illegal and legitimate or illegitimate behaviours. This goes to the heart of the problem if the budget process is to be a routine method to curb inefficient corruption systemically. But those definitions do not help with the sensitivity problems within government and budget processes raised by Laing (2024).

Of the papers reviewed in this rapid SLR the paper that is closest to dealing with the sensitivity issue is Johston's paper on China's Surge of Corruption, which particularly focuses attention on legitimate forms of behaviour that could be construed as corruption in certain contexts and is considered with the section on the "political dilemma" (Hao and Johnston, 1995).

In their simplest form, corruption is defined in this paper as "the abuse of power", while political manoeuvring is defined as the "use of power". Slightly longer forms are "abuse of power in the private interest" and "use of power in the public interest".

A distinction is made between corruption and what is termed "political manoeuvring" to better understand the issues that concern power centres within governments and countries. It is argued that there is indeed a big difference between the corruption and "political manoeuvring" and the idea of "intent" is what separates them. With this in mind, the following two longer definitions are offered here as a step towards achieving a systematic and safe approach to curbing corruption through the budget process.

Defining what Corruption Is and What it Isn't

Corruption *is the* ***abuse of power*** *to gain or retain an advantage for oneself, someone else, and/or some other group (****private interest****).*

Political Manoeuvring *is the* ***use of power*** *to gain or retain political, social, and/or economic outcomes in the* ***public interest****.*

The difference is intent

Power sources *include: administrative, electoral, political, executive, and judicial.* ***Power here is not limited to public power*** *and can include: star, academic, professional body, lending, granting, monopoly, monopsony etc.*

The idea of political manoeuvring is similar to some concepts within the academic field of budget theory and political budget cycles. Political budget cycle theory asserts that the electoral cycle incentives increase corruption, spending, deficits and rent seeking prior to elections (Persson, 2003; Persson et al., 2003; Shi and Svensson, 2006), and that corruption increases as elections loom (Sidorkin and Vorobyev, 2018). The objective being to gain or retain power. What the definitions of corruption and political manoeuvring draw out compared to the political budget theory for example, is that it purposively distinguishes between use of power in the public or private interests based on intent and how power is exercised, enabling a more systematic approach to reducing corruption and expensive or failed political manoeuvres through the budget process.

It is argued that appreciating the difference between corruption and political manoeuvring is to appreciate the reality of government. While criticism of the difficulties of proving intent are justified, the problems are not insurmountable as legislation and administrative processes can be developed to support a workable distinction. Moreover, proving intent is done routinely in other areas of law, such as the intent to kill, which establishes culpability and appropriate charges related to the crime of homicide.

Abuse and use of powers can be analysed through various methods, especially for all forms of power. This paper focuses on administrative powers in public finance systems, which are crucial as they often enable other powers. For instance, electoral power appoints key leadership positions, political power allocates resources, executive power builds networks, judicial power is funded by allocated budgets, academic power is bolstered by grants, communication power relies on tied public subsidies and granting and lending power creates leverage over people and policies.

The objective or intent of the action is crucial to the difference between use and abuse of power. These definitions differentiate between the intention to benefit a specific group for private interests in the case of corruption, and the intention to achieve outcomes in the public interest, whether economic, social, or political, in the case of political manoeuvring.

A classic example of the difference between corruption and political manoeuvres is the story of President Lincoln and the actions he took to secure the abolishment of slavery (see Annex E: Classic Example of the Difference Between Corruption and a Political Manoeuvre on page 55).

4. Theory and Methodology

The theory and methodology used to estimate fiscal space including the costs of corruption and other efficiency losses can be found in the preceding 2024 ECPR paper (Laing, 2024). A summary is provided at Annex F: Summary of Theory and Methodology on page 58.

The model is available at: https://artificialfiscalintelligence.com/usa_fis

5. Results

This section presents results in five different areas: i) Four US Fiscal Space Scenarios; ii) Drivers of US Fiscal Space; iii) Inspection of the Four Dimensions of US Fiscal Space: iv) G20+5 Efficiency (Financial and Non-Financial Performance) Benchmarks and Other Comparators; and v) US Fiscal Forecast Volatility. The section ends with a trend analysis of on data on trust in US institutions

US Fiscal Space Scenarios

Four fiscal space scenarios are presented for the US based on three different set up fiscal space parameters (see Figure 6 to Figure 9 starting at page 100):

1. Low Tax (20% of GDP), Strong Borrowing (70%), and Very Strong NATO Defense (3% of GDP) and OECD Donor Aid targets (0.5% of GNI)
2. Low Tax (20% of GDP), Very Strong Borrowing (125%), and Very Strong NATO Defense (3% of GDP) and OECD Donor Aid targets (0.5% of GNI)
3. Moderate Tax (20% of GDP), Very Strong Borrowing (125%), and Very Strong NATO Defense (3% of GDP) and OECD Donor Aid targets (0.5% of GNI)
4. Moderate Tax (20% of GDP), Very Strong Borrowing (125%), and Strongest NATO Defense (5% of GDP) and OECD Donor Aid targets (0.5% of GNI)

Baseline Scenario

Under the base case assumptions, $1.7tr or (7.4% of GDP) of fiscal space is available, but the only significant source of fiscal space originates from being more efficient. Tax to GDP levels are already at limits be it policy limits established by the current and previous administration or in keeping with long term trends of tax to GDP ratios (see section on Fiscal Space from Tax on page 14). NATO and OECD country aid contributions to US policy agenda would be minimal value at $343b or 1.4% of GDP. There is no fiscal space from borrowing more as debt limits are well over standard debt sustainability thresholds. The only remaining source of fiscal space is efficiency and is estimated to be up to $1.4 trillion p.a. flow, or 5.9% of US GDP.

It should be noted that fiscal space through efficiency is one of hardest forms of fiscal space to create as normally this is often achieved by taking money away from some purpose or group and either booking it as an enduring saving or allocating it for a different purpose or group to achieve higher impacts in line with government policy preferences. Such policy change is difficult as there is usually backlash from the interests vested in the current allocations.

Scenario 2: Increasing Debt Threshold

Under the base case assumptions, $3.3tr or (13.8% of GDP) of fiscal space is available. This scenario has the debt threshold increased. Here, debt becomes another relatively large source of fiscal space valued at $1.5tr (or 6.4% of GDP), but only when the debt to GDP threshold is lifted from 70% to 125%. At this threshold assumption, $1.5tr stock of fiscal space can be created, but only as a once off change in stock.

Increasing debt is generally the easiest form of fiscal space to create, as it does not take resources away from any existing purpose or group and allows more money to be allocated to new or existing purposes or groups. Hence it is not surprising to see countries that struggle with debt sustainability problems, return to bad practices after debt forgiveness or debt restructuring is achieved, with no or only minimal improvements in efficiency and tax takes (Laing, 2022).

Scenario 3: Increasing Tax Threshold

Under version three, additional fiscal space of $1.0tr p.a. (4.2% of GDP) can be created through tax policy changes bringing total fiscal space to 4.2tr (or 18% of GDP). Negative impacts on growth are not taken into consideration, nor the impacts based on what the debt is financing. For example, the use of debt to fund recurrent expenditures, such as social security or aid, has a different macro-fiscal-sustainability implications than if debt is used to finance energy or transport infrastructure programs.

Similar to efficiency, tax policy increase is a particularly difficult source of fiscal space to create, due to the electoral impactions from increasing taxes.

Scenario 4: Increasing 3rd Party Payer/Grant Threshold

Scenario 4 reflects the recent policy decision to increase the NATO target to 5% of GDP, comprising 3.5% hard military spending, and 1.5% for soft security spending like infrastructure, cybersecurity and possibly statecraft or aid-like activities. The other component of the 3rd party paper/grant area is aid. This is kept at 0.5% of GNI, though with 5% security spending, of which 1.5% is for "soft security", there is an option to run the model with aid at 0.3% of GNI when NATO is at 5%.

Under the increase NATO target, fiscal space from 3rd party payers/grants becomes significant at $0.8tr or 3.4% of GDP, bringing total fiscal space to $4.7tr or 20% of GDP. The increased spending targets has increased US 3rd Party Payer fiscal space by 2% of GDP (total 3.4%) and dominates aid-related fiscal space (NATO at 3.3% of GDP while aid is 0.1% of US GDP).

Drivers of US Fiscal Space

The four drivers of US fiscal space reveal that the easiest form of fiscal space creation is debt and that it has been rapidly and fully exploited, while the other three have been relatively stable (see Figure 10 on page 102).

The debt to GDP ratio skyrocketed to well over 100% of GDP since the turn of the century when it was 33%. While easy politically to create fiscal space from debt when levels are low,

the risks to the nation and future generations are significant including wastage, corruption and fiscal catastrophe if a government becomes unable to make good on interest payments. Moreover, there are other serious consequences from increasing interest payments including squeezing out priority expenditures.

Financing recurrent expenditure through debt also means having future generations pay for current generations living costs, current and past political manoeuvres, and corruption. The payment can be in the form of higher interest payments or the economic and social costs of a fiscal crisis.

The standard practice is for debt to finance infrastructure rather than operational costs like aid, social protection, and subsidies. That is why government accounting standards separate operating deficits and consolidate acquisitions of non-financial and financial assets together. That said, the practice of deficit spending has been argued to be a political outcome rather than an economic one (Savage, 2019).

The standard approach to reduce debt without having to use real money is via growth and inflation. Higher economic growth driven by a coherent macro-fiscal strategy makes debt relatively smaller. Similarly, inflation reduces the real value of the debt. Currency exchange rates also have an effect but can be ambiguous. It should be noted that inflation can be created through various monetary policies including low interest rates and exploitation of seinorage powers including quantitative easing (QE) and simple money printing.

Risks associated with QE are significant and include out of control inflation, loss of trust in the currency and corruption at a massive scale due to the conflicts of interests when determining bank beneficiaries and early round borrowers.

The General Government Tax to GDP ratio has been stable since 1990 hovering around 20% (+/- 3%), which is in line with global averages and is subject to confounding macro-fiscal theories, such Laffer, where there may be linkages between high tax and low growth.

Third Party Payments from NATO and AID are relatively stable at 1% of US GDP in aggregate, which is relatively small compared to the other three sources of fiscal space. While it is easier politically compared to increasing taxes or being more efficient, it is limited in revenue raising potential for the US, and there are associated risks including for defence and aid-related inefficiencies and corruption.

Inefficiency is a key source of fiscal space, but since estimates are driven by publicly available data, which is also lumpy, the trends are more unstable, ranging around the 4-12% of GDP. Inefficiency is probably the hardest source of fiscal space to create given the competing and conflicting vested interests.

Future directions of fiscal space drivers under US Fiscal Space Creation Scenario 4 would push the four dimensions in certain ways.

- Tax would go up to well above 25% of GDP. The policy appears to be through use of customs taxes (tariffs) rather than company, individual, consumption or consumption taxes.
- Debt may go up by 6.4% of GDP but it could also fall depending significantly subject to how successful tax policy change becomes.
- Third Party Payers in the form of recent the NATO policy decision doubles current levels by 1.1% of GDP.
- Effect on efficiency is ambiguous. While the US Department of Government Efficiency (DOGE) estimates that as at 9/8/25, $199b has been saved from efficiency measures, those savings may have been used to finance equally inefficient fiscal policy. Analysis is needed to assess the extent to which DOGE efficiency savings are those that target policy differences (e.g. immigration, diversity and aid policies) with those that target political patronage systems, which can theoretically be one and the same.

Inspection of the Four Dimensions of US Fiscal Space

This section dives deeper into the four dimensions of US fiscal space, which looks at performance over time providing insights to various fiscal behaviours including corruption. The section first reviews trends in balance sheet metrics, followed by taxes, grants and third-party payers and ends with a detailed look at inefficiencies and corruption.

Four core comparators used for financial performance metrics are: US$, percentage of GDP, percentage of expenditure or revenue (depending on the metric); and in per capita terms.

Country comparator used is the G20+5 group, which comprise the G20 and the three missing countries from the 7 most populist countries (populations over 200m: India and China (1.39b), US (0.34b), Indonesia (0.26b), Brazil and *Pakistan* (0.21b) and *Nigeria* (0.20b)), plus Philippines, Ireland and New Zealand. The complete list is: Argentina, Australia, Brazil,

Canada, China, France, Germany, India, Indonesia, *Ireland*, Italy, Japan, Korea, Mexico, *New Zealand*, *Nigeria*, *Pakistan, Philippines*, Russia, Saudi Arabia, Singapore, South Africa, Turkey, United Kingdom and the United States.

Fiscal Space from the Balance Sheet

This balance sheet section focuses on key aggregate metrics, which can red-flag corruption and other forms of inefficiency. The four key aggregates are: i) Net Worth; ii) Liabilities; iii) Non-Financial Assets; and iv) Financial Assets.

Net Worth (Assets – Liabilities)

The review of the US balance Sheet reveals major problems with high and increasing levels of negative net worth and high liability levels (see Figure 11 on page 102). Negative net worth and high debt are indicators of a long history of inefficiency, corruption, cost-ineffective political manoeuvring, and/or poor evidence-based decision making, all of which arguably affect each other.

Figure 11 reveals that negative net worth of the US general government sector has been deteriorating rapidly in all four comparator metrics. It should be noted, however, that there are some issues with asset valuations on the balance sheets. That said, there are perverse incentives to not disclose full and accurate balance sheet information.

The current positions are $10tr in Negative Net Worth for the general government (GG) and $25tr for the central government (CG). This is equivalent to 40% of GDP for GG and 90% for CG, or around 100% of Revenue for GG and 500% for CG, and over US$30k per person (GG) and US$70k (CG). The difference between GG and CG is driven by positive net worth disclosed by state governments. Further research is warranted on GG net worth.

Figure 12 shows that net worth is increasing at the state level. This means that that aggregate state Government increasing net worth positions off sets Central Government's declining negative Net Worth Positions. Net-Worth Decline is driven at Central/Federal Government Level not by State Governments.

A review of the G20+5 group reveals that US and UK are outliers with serious declines in net worth (see Figure 13). While only 10 countries disclose net worth data on the IMF GFS database, none of those other countries have data with serious negative net worth positions. The other countries with some negative net worth positions are Mexico, Australia, and Brazil.

Liabilities

US GG liabilities have been increasing rapidly in all four comparator metrics (see Figure 14). The 2008 GFC saw a big permanent increase, followed by temporary increase during COVID. In 2023 the levels are $38 trillion in GG liabilities while at the CG level it is $25tr, representing 140% of GDP (GG) and 90% (CG), or around 450% of Revenue (GG) and 500% (CG), and over US$110k per person (GG) and US$70k per person (CG).

At the state level, there have been real declines in liabilities in all four comparator metrics (see Figure 15). In contrast to US GG trends, the GFC and COVID were not big drivers at the state level. It does, however, reveal the power of growth and inflation on debt reduction when nominal liabilities are held constant.

A review of the G20+5 group reveals that Japan, UK, Italy and US are outliers with very high liability positions. The GFC generally had permanent increases in debt, while COVID had temporary increases (see Figure 16).

Non-Financial Assets

Trends in US GG stock of non-financial assets (NFA) raises warning flags in that levels plateaued since 2010 with no growth in the stock of assets as measured as a percent of GDP or as a percent of revenue. This means that all the infrastructure/capital spending, claimed or otherwise, is not turning into an increase in assets, either because depreciation is going faster than investment, or the investment does not end up as capital but goes into current or operating expenditures – or forms of corruption such as political patronage, or forms of political manoeuvring such as legislative and budget vote buying to secure policy objectives believed to be in the national interest (according to political party priority policies).

Trend analysis reveals that there was a major increase in NFAs up to the 2008 GFC, with no sustained increase since. While NFA stocks as percent of GDP were relatively stable after the financial crisis, the Crisis saw collapses in revenue (explaining spike in NFA as percent of total revenue). The real decline in the stock of non-financial assets in terms of percent of GDP and Revenue can be seen at Figure 18.

The review of the G20+5 group shows that US Stocks of NFA are higher than other countries in nominal US$ and in per capita terms and is third largest as percent of revenue and fourth largest as percent of GDP (see Figure 19). A big increase by Indonesia in 2019-20 is visible, the reason of which needs investigation, but could be due to existing non-financial assets being brought on to the balance sheet, rather than a creation of new assets.

Financial Assets

Trends in US GG stock of financial assets reveal volatility during the 2008 GFC and COVID as percent of revenue and to a lesser extent as percent of GDP. These counter-cyclical movements reveal stabilizing monetary-fiscal policy efforts (see Figure 20). Financial asset stocks increase then decrease during COVID may reflect quantitative easing (QE) effects.

QE effects need further research to assess what happened to QE generated income at central banks and if government also received newly created assets in addition to central bank buying up government debt.

There are mixed results in stocks of financial assets at the state level, with financial assets growing slower than revenue and GDP generally, except during COVID.

For the G20+5 group, Japan and USA are outliers in the stock of financial assets. Japan is by far the highest as percent of revenue at over 300% and as a per cent of GDP at over 120%. US is a lot lower at 87% of revenue and 26% of GDP.

Fiscal Space from Tax Revenue

Taxes are reviewed here with a focus on aggregate taxes generally but also reviewing tariffs as a special form of tax. Seinorage is not reviewed as another special form of tax due to the different data requirements, which are not currently in the global dataset created for fiscal space analysis.

Additional benchmarking comparators are used in this section (Region, Income Group, Dominant Religious Group, Corruption Perceptions (CPI), Natural Resource Dependency, Diversity (Fractionalization), Legal Tradition, State Fragility, BTI Democracy Status, Populations groups, System of Government, and Political Finance Regulations (RoPFI).

The main message from this analysis is that taxes are relatively stable over time and are arguably already at long-term sustainable levels. US tariffs are found to be back to historical levels, while tariff incidence analysis reveals implications for “beggar thy neighbour” and geopolitics generally. It should be noted that US geopolitical competitors have lower levels of tax takes.

Figure 23 shows that aggregate GG tax collections are relatively stable over time in terms of percent of GDP (c20%) and as a percent of Total Revenue (c63%). Taxes fell unambiguously during the 2008 Financial Crisis. Taxes also unambiguously rose during COVID, which requires further investigations including in tax composition and source.

At the state government level a similar trend is found, with even more stable levels of tax collections over the last two decades, but with dips in tax takes as percent of total state revenues due to global shocks: 9/11, the 2008 Global Financial Crisis and COVID for both percent of revenue and GDP except COVID, which only fell as precent of revenue (see Figure 24).

A review of general government tax take trends during Democrat and Republican presidencies found that Democrat presidencies grow taxes once in power, while Republican Presidencies Cut taxes once in power but then grow again. Overall averages are the same in terms of percent of GDP (19%) and Revenues (65%) over the period from 1977-23). Republicans' tax trend profile is more volatile because their presidencies generally start with cuts. (See Figure 25.)

The review of the G20+5 group found that China and US are outliers in nominal tax collections with US at $5.5tr and China at $2.8tr in 2022 (see Figure 26). The two biggest taxing countries in the group as percent of GDP terms are New Zealand (32%) and France (31%). For comparison, the US is 20%. The two biggest taxing countries in percent of revenue are New Zealand (87%) and Australia (82%). US is 63%. The three biggest taxing countries in per capita terms are Australia and Ireland (both at $18k pp) and US ($17k pp).

A deeper inspection of tax related issues was also conducted. It covered benchmarking against a range of comparators (e.g. country income group, region, natural resource dependency status etc), a review of tariffs as a special type of tax, and exploring the relationship between tax and growth A summary is provided at Annex G: Fiscal Space, Tax and Some Other Comparators on page 61.

Fiscal Space from Grants and 3rd Party Payments

This section on fiscal space generated from grants and 3rd Party Payments section focuses on NATO spending and OECD donor spending in support of US strategic policy objectives. Other mechanisms such as through G20 agreements are not modelled here.

The review found that fiscal space from NATO sources is limited since US Allies spending on NATO increased rapidly over the last 10 years from around 1.3% of US GDP in 2014 to on average 1.9% of GDP in 2023 (see Figure 52 and Table 6). US Fiscal Space here is the additional money raised if US Allies in NATO met notional target of 2% of NATO country GDP - represented as percent of US GDP. The progress on meeting NATO spending targets means that there is limited fiscal space available without increase NATO spending targets above the former 2% target. The fiscal space scenario in the model provides for 3% and 5% targets. The 5% target, which is now NATO policy, has increased fiscal space by 2% of GDP

(total 3.4%) and so dominates aid-related fiscal space (NATO at 3.3% of GDP while aid is 0.1% of US GDP).

Fiscal space from aid sources is also limited, as it is relatively small source generally (see Figure 53 and Table 7). US Fiscal Space here is the additional money raised if US Allies (i.e. OECD Development Assistance Committee – DAC -Donors) met the notional Aid target of 0.5% or 0.7% of donor country GNI - represented as percent of US GDP. The review reveals that US Allies (DAC-Donors) aid in terms of average percent of GNI increased rapidly from around 0.1% at the turn of the century peaking at 0.35% in 2010. Levels declined to 0.28% of country GNI, with a big increase back to 0.35% in 2022.

Fiscal Space from Inefficiency and Corruption

This section examines fiscal space with particular attention to corruption and other inefficiencies present within the United States public finance system. It builds on the earlier sections that distinguish between corruption and political manoeuvres and defined efficiency as well as providing the theory and methodologies on how inefficiency and corruption is quantified in this paper. It also draws on background theory of where how the budget cycle fits within democratic pubic accountably frameworks (Laing, 2024). A summary is also provided of the corrupt objective outlined in the background theory for each point of the "follow-money corruption cycle" of generic public finance systems (see Figure 1 on page 93).

For the purposes of fiscal space analysis, corruption is identified as a source of inefficiency; however, certain types of corruption may be less inefficient than others, and in some scenarios, can be more efficient than non-corrupt activities when comparing counterfactual situations.

Laing (2024) tackles the efficient corruption and the counterfactual problem by providing a blunt example of corruption in Afghanistan with corruption in Ethiopia. In Afghanistan, revenues generated through corrupt practices were transferred abroad, thereby not contributing to domestic economic development. In contrast, in Ethiopia, proceeds from illicit customs activities were invested in the construction sector, fostering employment and supporting economic growth. In the Ethiopia example, a counterfactual also emerges that if corruption had not occurred and customs revenue was spent through usual inefficient government channels, it is unlikely that poor government spending would have produced the same level of growth and employment.

Quantification of efficiency losses that the model produces is presented here. The section opens with a review of the framework of how corruption works generally in the different public

finance systems. It then reviews the losses for the US and then drills down on quantified systemic risks and the risk driver metrics related to public finance systems (e.g. AML, CPI, OBI, PEFA and B2A, RoLI, SPI, WGI) and sovereign lending risks.

Annex I: G20 Efficiency Benchmarks and Other Comparators on page 75 has a deeper review of US efficiency drawing on country benchmarks and comparators in three areas: i) main fiscal aggregates; ii) key sectors and functions of government including spending and outcomes, as indicators of efficiency and value for money (thereby also providing red flags for potential corruption and cost-ineffective political manoeuvres); and iii) key inputs (e.g. salaries, subsidies and capital).

Losses from Corruption and Other Inefficiencies

The latest estimate of US losses from corruption and other inefficiencies due to weak public finance systems is $1.4tr p.a. (in current terms), representing 16% of expenditures, 6% of GDP or $4,200 per person (see Figure 54). Most of the losses (c$533b) are incurred in the budget system, where resources are allocated by congress and the executive and managed by the civil service. Audit, where the responsibility for detecting irregularities, malfeasance and misrepresentations in fiscal reports is the next largest at $407b. Balance sheet, where assets and liabilities are managed is the third largest source at $270b. Procurement is relatively low on the list at $62b as the point where the corruption and inefficiency originates is where the model places the systemic loss. In the procurement case it is the budget where corrupt deals are done and expensive political manoeuvres also often originate. (See Figure 54).

These estimates of efficiency losses need to be seen in context as the US performs very well when making comparison to other countries using benchmarking metrics. On their own they may seem huge, but they are low when comparing levels as percent of GDP and percent of expenditures. The first paper in this series produced league tables of corruption that showed the US was one of the top performing countries when comparisons move away from nominal losses dominated in US dollars and to the benchmark metrics (Laing, 2024, p. 55). An updated league table for the G20+5 group (see Table 8) has the US placed 5th best in terms of percent of government expenditure and percent of GDP. It was 4th worst in terms of losses per capita behind, France, Italy and Ireland. As a percent of revenue, the US was in the middle of the pack.

The risks quantified for each point of the US follow-money corruption cycle are presented at Figure 61, which shows an aggregate risk of 0.41 (where 1 is perfect risk and 0 is no risk). Highest risks are in procurement (0.66), banking (0.55), granting systems (0.51) and the budget (0.41).

A review of the risk drivers that form the above risks is presented here. Various metrics are assessed which are used to quantify fiduciary and development risks, which are drawn on to estimate the costs of corruption and other inefficiency losses. Some publicly available metrics used by the model were not produced or published for the US and so were not drawn on for risk and cost calculations. These include CPIA (because US is a high-income country), Gender and standard PEFAs (as these are generally used by developing countries, and high income countries do not publish them when they do them internally) and the OECD Methodology for Assessing Procurement Systems (MAPS). PEFA results are crucial to the costing model. Consequently, estimates for the US were used based on high income country performance and calculations of budget reliability (further research is planned).

The following eight metrics are available on the US that are used in the model: AML Index, CPI, OBI, PEFA and budget to actual ratios (B2A), RoLI, SPI, and WGI. A review of sovereign risk ratings is provided here, but the results are not used in the quantification of risk or costs.

In terms of Anti-Money Laundering the AML Index (0 good, 10 bad) shows that the US has experienced slight improvements over last decade from high of 5.26 in 2012 to a low of 4.30 in 2023 (see Figure 62). The US in middle of the pack at the country level (Estonia, Finland, Slovenia and New Zealand are best performing non-small states). The US outcome is typical for high income county and countries in the top CPI quintile. Buddhist, Muslim and Folk religion countries have the worst AML scores, while Jews have the best (Estonia, Finland and Iceland have some of the best scores).

The review of trends of the CPI has the US being stable at a moderate risk level of just under 0.5 over the last two decades (see Figure 64). A slight increase in recent times. The level is shown to be typical for high income county. Muslim, Buddhists and Hindu countries have highest CPI risks. Jews, Unaffiliated and Folk have the lowest CPI risks.

US performs very well under the OBI as it is second best for all questions, but has been declining over time, noting there are changes to the OBI framework over time also. High

income groups and North America and Europe are linked to high OBI scores. Highly resource dependent and Muslim countries generally have lowest scores (see Figure 65 and Table 14.

PEFA estimates were produced due to the non-availability of a public version for the US. The estimates were produced using high income country scores and calculated budget to actuals calculations (see also Table 15 on page 133). More work is needed to update estimates in collaboration with US authorities and/or US experts.

For PEFA benchmarks, Sub-Sharan Africa (SSA) has the highest risk for regions, while North America and Europe have the lowest risks. Income group follows intuition, with high income countries having the lowest risk, while low-income countries have the highest. Effective democracies have the lowest risk but there are mixed results. BTI Difficulty is closely linked with high difficulty linked to high risks. No Dominant religion has by far the highest risk. Fragility is a good predicator of high risk. No relationship is detected by government system and diversity. (See Figure 66.)

Reliability of original federal level budgets appears to have collapsed at the turn of the century. PEFA budget reliability grades were calculated from budget and actuals data. The data indicates that budgets were exceptionally reliable in the 70's and very good in the 80s and 90s. Poor budget reliability is an indicator of allocative inefficiency, budget auctions, corruption and budget-based political manoeuvring (pork barrel, vote buying etc). More work is needed to verify data and changes in classification, accounting and audit systems. (See Table 16.)

US is highly ranked in terms of risks related to the Rule of Law Index. Moreover, it has been very stable between 2015 and 2024. High income groups, North America and Europe, and solid democracies are all rated highly and much higher on average than other groups on RoLI. Unaffiliated religion countries have highest RoLI, while Muslim and Folk religions have the lowest. (See Figure 67).

Under the Statistical Performance Index (SPI) the US is highly ranked being 12th in 2023 and 5th over 2016-23 with sustained improvements over time. (see Figure 68 and Figure 69).

US is highly ranked under Worldwide Governance Indictors (WGI) but performance declines in 2019-20, driven by declines in political stability, voice and accountability and to a lesser extent control of corruption in 2020. CPI, Resource Dependency, region and Income group are all closely associated with WGI. (See Figure 72 and Figure 73).

The review of US sovereign risk reveals a recent decline in top sovereign risk ratings. from Fitch in August 2023, following on from Scope's lower tier rating on May 2017, and S&Ps in August 2011 (S&P unchanged from 2013). The review also found that all countries risk trended down from 1990 to 2000, with Christian countries following a similar profile. High income countries were found to have volatile risk ratings over time, while the bottom countries in the two bottom CPI quintiles had consistently high sovereign risks. (See Figure 76 and Figure 77.)

Losses by Sector of Government

The model estimates the losses from corruption and other inefficiencies for different parts of the public sector, as defined by the IMF (2014, pp. 16–32). Under the IMF definition, the public sector comprises public corporations and the general government sector. The model as currently constructed, only covers the general government sector. This includes the central government, budgetary central government, state government, local government, extra-budgetary operations and social security funds.

The state government is estimated to be the single largest sector for losses at $592b (2.45% of GDP), with the central government (excluding social security funds) close behind at $571b (2.52% of GDP). (See Table 9 on page 124.) Summary results of losses are provided in Annex H: Summary of US Sectoral and Functional Findings in the section on "Sectors of the US Government" on page 68 with loss estimates for US State Government according to the Follow-The-Money cycle is provided at Figure 55 on page 124.

Losses by Function of Government

The model also estimates the losses from corruption and other inefficiencies by function of government, as defined by the IMF (2014, pp. 142–170). Under the IMF definition, the government is split into ten core government functions (divisions/2 digit), which are further split into sub-functions (groups/3 digit) and functions (classes/4 digit). The model as currently constructed can estimate losses by core function or sub-function if data is available on the IMF GFS database. The US does not provide data at the sub-function level, unlike almost all G20 countries.

For the period 2020-22 at the general government sector, the four largest functions for losses are: i) Social Protection at $349b (1.50% of GDP); ii) Health at $346b (1.47%); iii) General Public Services at $190b (0.81%); and iv) Education at $189b (0.80%). (See Table 10 and Table 11 on page 124.) Loss estimates for these government functions according to the Follow-The-Money cycle is provided at Figure 56 to Figure 60 starting on page 126.

G20 Efficiency Benchmarks and Other Comparators

The fiscal space model provides the ability to undertake efficiency benchmarking analysis across a range of dimensions. An initial benchmarking assessment of the US against the G20+5 group of countries and the other types of comparators was undertaken.

Three areas are covered in the benchmarking assessment: i) Main Aggregates, which looks at sectorization and COFOG coherence; ii) Functions and Outcomes, which reviews spending and performance in six key functions of government (social security, public order and safety, education, health and agriculture); and iii) Key inputs, which reviews salaries, subsidies, interest payments, non-financial assets, net lending/borrowing, gross saving/borrowing and fiscal burden. A summary is provided at Annex I: G20 Efficiency Benchmarks and Other Comparators on page on page 75.

US Fiscal Forecast Volatility

US fiscal forecasting has been highly volatile for key metrics: i) GDP current; ii) GDP per capita; iii) Inflation; iv) Groos Debt; v) Revenues; vi) Expenditures; v) net lending/borrowing; and current accounts. (See Figure 165).

Trend Analysis of Trust in US Institutions

Analysis of data on trust in institutions revealed that trust in US institutions has fallen by over 30% since 1984. This was driven by large declines in trust in Congress (71% since 1984), Political Parties (50% since 2004 from a very low base) and Civil Services (30% since 1923). (See Figure 166.)

6. Discussion

The previous section ended with evidence that there has been a significant loss of trust in public institutions in the United States, especially in Congress and political parties. A research question emerges: Has the loss of trust over the last few decades been due to corruption and too much expensive political manoeuvres, and what can be done to reverse the trend? This paper contributes to answering the question.

The main aim of this paper is put to peer review two novel fiscal intelligence models, with the US being used as country case study. The tools, when used together, are able to: i) provide an estimate the costs of corruption and other efficiency losses for a country; and then ii) apply efficiency loss estimates in a fiscal space framework. It is theorised that by presenting

corruption as a fiscal space issue, it opens the way to more constructive efforts to reduce corruption and improve efficiency through the budget process.

Together with two novel definitions of what corruption is and what it is not opens the way further to deal with the sensitivity issue of corruption in the budget process as raised in a previous paper (Laing, 2024, p. 1). The issue of corruption being an abuse of power in a private interest, and political manoeuvring as use of power in the public interest, and how public finance systems facilitate both, is central to understanding how governments work in practice and how corruption and expensive political manoeuvres can be systematically and safely tackled through the budget process.

Politics can be ugly in any country, but it is also very real and reflects the very nature of humanity, both good and bad. It reflects a universal challenge of the clash of public duty values that can counter corruption, with self-interest instincts that can cause corruption. Adam Smith (1790) and Keynes (1936) both recognised this challenge.

Budgets concentrate power and money, making them vulnerable to both corruption and expensive and/or flippant political manoeuvres. The idea of flippant political manoeuvres is draws on the idea that it is much easier to spend other peoples' money in an irresponsible way.

The main challenge in reducing corruption through the budget process is clearly distinguishing between corrupt actions and legitimate political strategies, using legislative, administrative, judicial, and institutional tools. Understanding the difference and the boundary between the two is crucial.

Some of the questions presented are highly challenging. For example, where is the line between a political manoeuvre and corruption? Is the act of buying votes to remain in power considered corruption? Alternatively, is buying votes to abolish slavery by offering influential positions to known but powerful corrupt individuals an acceptable instance of high-stakes strategic political manoeuvring, where the means justified the ends? Furthermore, is using academic powers to protect one political party from an opposition party a form of corruption, especially if it involves intentional misinformation and fostering division? Should academic authority focus on uniting parties around well-developed and evidence-based public policy, or should they remain partisan on ideological grounds? This case study shows how treating corruption as a fiscal issue may encourage wider discussions and research.

Another aim of this paper is to support debate on how to tackle the US corruption problem by highlighting that the model produces estimates of $1.4t p.a. losses from corruption and other forms of inefficiency within the US Government. Overall, the objective is to present the case that tackling systemic corruption and inefficiency systematically and safely through the annual budget process can be achieved by presenting corruption as a source of fiscal space drawing on advanced fiscal intelligence systems, some based on publicly available data as used in this paper, and other much more powerful forms, drawing on internal confidential data, which is planned for another paper.

US Fiscal Space

Three scenarios of US fiscal space are presented. A baseline case where the only significant source of fiscal space was through the politically hard efficiency dimension, with $1.4t or 6% of GDP available as estimated by the costing model.

The baseline case reflects revealed constraints to fiscal space in the other three dimensions. Tax increases are difficult politically and there are possible costs to growth. Grants and third-party payments are at best a minor source of fiscal space, and debt levels are already too high, posing major fiscal economic, and social risks.

Increasing tax is not a realistic option given historical trends of highly stable tax levels, with links to Laffer type arguments of a negative relationship between growth and tax, which some evidence in support of this theory presented in the trend analysis of the G20+5 group of countries. The use of tariffs to increase tax take is one way to increase US tax take rates, though the consequences are uncertain.

Grants are not a big source for the US given its size and wealth, and third party payments are limited when analysing the two large relevant areas of NATO and Aid. With NATO targets increased to 3% of US Allied country GDPs and Aid targets set to 0.5% of donor country GNIs, total fiscal space fiscal space available is limited to 1.4% of US GDP or $343b p.a. At 5% of GDP, 3rd party payments become significant source of fiscal space (3.4% of GDP or $0.8b).

The easiest source of fiscal space is debt as it hurts no one immediately, though it does hurt future generations if poorly used and managed. Over the last two decades US debt levels have skyrocketed after the GFC, COVID and limited and/or unsuccessful attempts to tackle the debt problem, be it technical (e.g. insufficient knowledge of global debt dynamics) or political (e.g. to keep a particular party in power).

Diving Deeper into US Fiscal Space

US net worth, which is the difference between assets and liabilities, has been declining rapidly in all four comparator metrics used in this paper. The federal government rather than the state government has been driving the decline, with negative net worth levels at $25t equivalent to 40% of GDP, 500% of revenue or $30,000 per person. The seriousness of the negative net worth position is only unique to US and UK in the G20+5 group of countries. Further research is required on net worth disclosures, as the positions might well be due to incomplete recognition of asset values.

The level where US debt becomes catastrophic is not known but it may be very close. Interest payments are already at $1 trillion or 25% of revenues, squeezing out other priority expenditures, such as infrastructure, which is led by states rather than the federal government. If effective interest rates double or triple, then interest payments effectively double or triple, causing US payments to increase to $2-3trillion, risking a US default (including on itself), and more and accelerating use of seinorage powers such as quantitative easing (QE) and simple money printing, further risking uncontrolled inflation.

It should be noted that QE is tempting as a fiscal space creator because of its inflationary effects, where in the absence of growth, inflation cuts the value of the existing debt and new debt helps stimulate growth. But there are limits to this strategy as new debt can wipe out any benefits of inflationary-based debt reduction.

These three current constraints of US fiscal space put pressure on the use of efficiency as the dominant source of fiscal space over the short-to-medium term. But this is hard politically as it involves doing more with the same or less, which means taking money away from one group who are not using it well and giving it to another group who will use it better or using it to pay down debt.

Two other fiscal space scenarios provide higher thresholds for borrowing and tax collection. For debt, the limit was increased to 125% of GDP, from 70%. This provided $1.6 trillion in a once off funding, or 7% of GDP. The risk from this policy, is catastrophic monetary-macro-fiscal-social impacts. In the third scenario, tax collections had the threshold increased to 25% of GDP from 20%, which raised $1b on a per annum basis, equivalent to 4.1% of GDP every year. The biggest risk being growth, and possibly one of the secrets of success to US sustainable growth – a sustained and stable low-to-moderate tax regime (noting there are tax mix issues such as those associated with tariffs and personal income tax). A significant political risk is that

the governing administration responsible for implementing the policy may be removed from office by dissatisfied constituents. Tax increase taxes on international trade (i.e. tariffs) has lower political risk but impacts are uncertain.

Efficiency, Corruption and US Fiscal Space

$1.4tr in losses every year is estimated to be sourced from corruption, expensive and/or flippant political manoeuvres, and other forms of inefficiency, such as poor policy, good policy badly implemented, and weakness in public finance systems generally.

The major risk drivers were from public finance systems such as how funds are allocated through the budget process by the executive, congress and public finance officials. The risk drivers included in the model for the US were AML, CPI, OBI, PEFA (estimate), RoLI, SPI, and WGI. Sovereign risk ratings were also reviewed but not used within the model.

Risk metrics where US performed relatively poorly on included AML and CPI (middle of the G20+5 pack). Sovereign risk ratings for the US have recently declined also, starting in 2011 by S&P, followed later in 2017 by Scope, then Fitch in 2023.

US performed relatively well in three metrics: OBI in terms of disclosures (2nd best), RoLI, SPI (5th) and WGI.

Analysis of budget reliability metrics revealed a significant problem with the budget process with very poor budget execution performance (Grade Ds and Cs under PEFA), which started in 2002 when the first of three major crises hit the US (9/11, GFC and COVID). The poor performance never recovered over the following two decades except for two years in 2013-14.

Bad practices seem to have crept into the way US budgets are put together and approved by the Executive and Congress. Confirmation and cause of the major decline in the reliability of budgets at the turn of the century requires further research. Initial review of how budgets have been conducted point to the weaking of the integrity of a single budget process that sets the allocation for the year.

A single budget process allows all the trade-offs between competing priorities – policy and people – to be done at the same time. The US system appears geared to no longer to follow that practice and has created (or recreated) an auction-like system (Laing, 2017) where interests of policy and people are traded at different times of the year on different packages of introduced legislation, often containing unrelated policies.

Legislation that has major fiscal impacts appear to be routinely introduced outside the budget process, compromising its integrity. This introduces much more scope for corruption and expensive or cost-ineffective political manoeuvres into the budget, driving up debts and deficits and driving down performance and efficiency. Moreover, an auction-like system is not conducive to curbing corruption and finding savings from inefficiencies, let alone responding to the need to tackle toxic levels of historical political manoeuvres that get stuck in the budget. Further discussion is presented at Annex H: on page 68.

Due to lack of granular risk estimates at sector and function levels, whole of government level risk metrics were used for both dimensions. This is a weakness in the current model. Future models that can incorporate sector and function specific risk metrics will provide more robust estimates. Models using confidential/internal data would be able to produce more granular risk estimates and as well as other inefficiency and corruption red flags.

Comparator Metrics

This paper applied a number of country comparator metrics six of which are in common use: i) constant and current; ii) percent of GDP, iii) percent of fiscal aggregates (e.g. revenue, expenditure, deficits); iv) Region, v) Income Group, and vi) population based. Nine novel or less common comparators metrics were also applied: i) Dominant Religious Group; ii) Corruption Perceptions (CPI); iii) Natural Resource Dependency; iv) Diversity (Fractionalization); v) Legal Tradition; vi) State Fragility; vii) BTI Democracy Status; viii) System of Government; and ix) Political Finance Regulations (RoPFI). These were found to be useful, and further research is recommended in this area.

Data Issues

The analysis has revealed weaknesses in publicly available data including the IMF GFS database and risk datasets. The IMF GFS database has coherence problems between COFOG disclosures and economic classification-based disclosures. Moreover, the level of granularity of COFOG data is not deep, with total expenditures by COFOG often only being disclosed. Cross tabulation with economic classification is not disclosed (i.e. Salaries, subsidies and social benefits in the health function are not disclosed). With advancements in modern multidimensional budget and accounting techniques, this can be fixed relatively easily but requires a broad political agreement at the international level. Similarly, corruption and fiduciary risk datasets in the different sectors are also not readily available. Improvements in these two data sources would allow the model to provide better estimates.

Testability of the parameter used is possible and is being pursued through various means including interviews and use of fiscal intelligence models that are much more powerful at detecting inefficiency and corruption risks.

7. Overall Summary and Conclusion

This paper reveals how two novel fiscal intelligence systems can be used to present anticorruption as a source of fiscal space while showing the depth and scope of analysis that the datasets enable. These include deep dives in country level metrics and benchmarking against other countries or groups of countries (e.g. regional, income group status, dominant religion, resource dependency etc).

The paper reveals that addressing corruption through the budget process should be considered within the broader context of budgeting, accounting for other fiscal policy trade-offs that government's make during resource allocation. It also points out that a high level of fiscal intelligence is needed to reliably identify and mitigate inefficiencies and expensive political manoeuvres within the budget process. The model referenced utilizes only publicly available data. In contrast, a government-led budget process focused on reducing corruption would have access to comprehensive financial and non-financial performance data, thereby significantly enhancing the evidentiary foundation.

The US is used as the first country case application of the methodologies in an academic context. The models include extensive fiscal and risk data that facilitate a systematic method for estimating various aspects of fiscal space, as well as an efficient way to examine details to identify issues, drivers, and solutions to problems.

Two systematic literature reviews (SLRs) were conducted. One was on what the literature says about corruption in the US, including what it says about the corruption in the different parts of the US public finance systems (e.g. budget, audit, payroll etc). It found 511 articles and within these, nine of the twelve "follow-the-money corruption cycle" nodes had relevant papers. The other SLR was review on the definition of corruption, which highlighted the difficulty of reaching a consensus on the definition. Building on this definition SLR this paper proposes new definitions of what corruption is and what it isn't.

A distinction is made purposively between corruption and what is termed "political manoeuvring" to better understand the issues that concern power centres within governments and countries.

The paper defines *corruption as "the abuse of power* (including administrative, electoral, political, executive, judicial, communication, academic and professional qualifications) to gain or retain an advantage for oneself, someone else, and/or some other group (private interest)". It defines *political manoeuvring as the "use of power* to gain or retain political, social, and/or economic outcomes in the public interest".

A rapid analysis of World Value Survey data was also undertaken, which found a significant decline in trust in US institutions by over 30% since 1984, driven by massive declines in trust in Congress (71% since 1984) and Political Parties (50% since 2004 from a very low base). The paper poses the question of whether the decline in trust is due, in part, by problems caused by corruption, expensive or ineffective political manoeuvres and/or general inefficient fiscal policies.

Headline Findings

The headline finding from the analysis is that efficiency may well be the only significant source of fiscal space available to the US, though it the most difficult politically. The paper estimates that $1.4t or 5.9% of GDP is available.

There are major constraints to fiscal space creation in the other three dimensions.

- The easiest source of fiscal space to create is debt, but for the US it is already far too high, with levels skyrocketing after the GFC and COVID and failed attempts to reduce levels and over reliance on QE and debt to solve structural problems, much of which might be embedded within the inefficiency problems.
    - Under sensitivity analysis, the model was allowed to exceed existing levels and reach 125% of GDP, which provided $1.5tr (6.4% of GDP)
- Increasing tax is not a realistic option given historical trends of highly stable tax levels, with links to Laffer type arguments of a negative relationship between growth and tax.
    - Change in policy on tax on international trade allowing for tax take to reach 25% of GDP was modelled and found to increase fiscal space by $1tr p.a. (4.2% of GDP p.a.)
- Grants are not a big source for the US given its size and wealth, and third-party payments are limited when analysing the two large relevant areas of NATO and Aid.

- NATO decision to increase spending targets to 5% of allied country GDP increased US 3rd Party Payer fiscal space estimates by 2% of GDP (total 3.4%) and dominates aid-related fiscal space (NATO at 3.3% of GDP while aid is 0.1% of US GDP).

Additional evidence is presented of major problems facing the US. These include negative net worth positions (related to the massive debt positions), and troubles that emerged at the turn of the century in the way the US Budget is put together. These create two decades long trend of unreliable budgets, creating perverse incentives for auction-style budgeting, compromising the integrity of a single budget process.

A review of efficiency from a purpose of spending perspective was conducted and found many red flags for the presence of corruption, expensive political manoeuvres or poor policy development and implementation capabilities. More granular, internal data is required to detect and deter problem contracts, payrolls, policies and legislation and in different parts of the US public finance systems.

The findings at the sector, function and input level for the US are included in Annex I: G20 Efficiency Benchmarks and Other Comparators on page 75. The headline findings are:

- state government losses in aggregate are slightly larger the federal/central government;
- the social protection system is big and inefficient;
- US power projection is declining while China dominates in soft power;
- public order and safety is declining and is a state driven function;
- education is big and a relatively efficient state-run function – but in decline;
- health is massive and inefficient with federal-state coordination issues; and
- inputs are dominated by salaries, social benefits and interest payments.

Next Steps

This paper is the second in a series of papers on the nexus of politics, efficiency and corruption in public finance systems. The first paper, "Curbing Corruption Through the Budget Process" (Laing, 2024), presented the methodology to estimate losses from corruption as a source of fiscal space in order to help incentivize a systematic approach to curbing corruption through

the budget process. This paper demonstrates the power of the models in a country context, being the US. The model can be applied to any country in the world.

The next paper in this series is envisaged to move towards the solutions to the problems that are revealed from such an approach to curbing corruption through the budget process. The solutions include new policy options related to legislative, administrative and oversight processes.

The fourth paper will move from the use of fiscal intelligence models that only draw on publicly available data, to data models that draw on internal and confidential data to help governments tackle the problems systematically and safely. Methods and uses will be explored in the paper.

While much has been revealed using the models, this paper is still just a first step in analysing corruption and fiscal space problems facing the US. Further research is required. Support, cooperation and access to more granular fiscal data will be needed to dive deeper into risks, corruption and inefficiency problems and broader policy response options.

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9. Annexes

Annex A: Sources of Data

Table 1. Data sources and Date Model Last Update

Category	Latest Last Updated
Benchmarks	**11/01/2025**
BTI 2008-24	11/01/2025
China Aid	29/09/2021
Country Religions 2010-50	10/01/2025
CPIA to 2021	10/01/2025
For briding SDG and WDI indicators	31/12/2021
Fractionalization data	18/10/2024
GNI Per Capita & Income Thresholds	09/12/2024
HDI	25/11/2022
IFC Data	08/01/2022
Open Budget data 2006-23	08/01/2025
Rule of Law Index 2012-24	09/01/2025
SDGs	04/10/2023
Sovereign Risk Ratings	12/01/2024
SPI 2004-2023	09/01/2025
Trust in Insitutions (worldvaluessurvey.org)	07/01/2025
WB DSI	16/12/2022
WDI	09/01/2025
Wordwide Governance Indicators	09/01/2025
World Bank Procurement Benchmarking Study	31/07/2021
Country Data	**29/12/2024**
US Budgets	29/12/2024
COVID	**06/01/2025**
IMF	**08/01/2025**
Afghanistan CoA plus Bridiging tables for GFS and COFOG	21/08/2021
BOP	16/12/2022
Classification data for GFS Aggregates	03/09/2021
GFS codes used in IMF datasets	01/11/2021
GFS COFOG	08/01/2025
GFS Expense	08/01/2025
GFS Main Aggregates and Balances	08/01/2025
GFS Revenue	08/01/2025
IMF Debt - Financial Assets and Liabilities by Counterpart Sector	08/01/2025
IMF Debt - Stock Integrated Balance Sheet	08/01/2025
IMF Financial Soundeness Indicators	02/04/2022
SDDS	26/12/2022
OECD	**08/01/2025**
OECD DAC CRS Classification System	21/11/2021
OECD DAC CRS Data	08/01/2025
PEFA Plus	**11/01/2025**
AML 2012-24	09/01/2025
CPI (TI) 2005-23	09/01/2025
FSI 2022	20/01/2023
MAPS	28/11/2023
Others: Classification, Grading and Indexation Systems Country bridging tables and mapping data PEFA 2011-2016 bridging tables	31/12/2021
PEFA 2011	24/12/2024
PEFA 2011 Annex	24/12/2024
PEFA 2016	24/12/2024
PEFA Gender	24/12/2024
SCI (retired)	04/03/2022
Specialised (fiscal sustainability, non-tax revenue, contract management, procurement, anti-corruption, communications and grant financing)	31/12/2021
TADAT	31/12/2021
USA Political Parties, Presidency and Congress	11/01/2025
WCO	31/12/2021
WEO	**09/01/2025**

Annex B: Systematic Literature Review – PRIMA 2020 Checklist Status

Table 2. PRIMA 2020 Checklist Status

Section and Topic	Item #	PRISMA 2020 Checklist item	Status
TITLE			
Title	1	Identify the report as a systematic review.	Systematic Literature Review of the Nexus of Politics, Efficiency and Corruption in Public Finance Systems
ABSTRACT			
Abstract	2	See the PRISMA 2020 for Abstracts checklist.	To be done at end
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of existing knowledge.	The rational for the review is to lay the groundwork for a PhD that explores the Nexus of Politics, Efficiency and Corruption in Public Finance Systems. Primarily, it is to establish a process that provides a solid knowledge foundation of what the literature already says about corruption within the context of the Nexus. Ultimately, the work is about solving the problem of why corruption is not routinely targeted as savings measure through the annual budget process.
Objectives	4	Provide an explicit statement of the objective(s) or question(s) the review addresses.	There are three core objectives for the review: 1. Undertake a Systematic Review of Systematic Reviews of Corruption to learn the process of systematic review and to determine what areas are covered in the literature already and what the core findings are. 2. Summarize what the literature says on corruption in the Follow-The-Money (FTM) points of Public Finance Systems as well as related issues such as costing corruption and the nexus of politics of efficiency and corruption. 3. Identify if there are any gaps in literature on costing corruption from a nexus & systemic perspective
METHODS			**There are three objectives for the review:**
Eligibility criteria	5	Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses.	Eligibility criteria was based on the following five areas: i) word search inclusion and exclusion lists; ii) Citescore rating of journals (quintiles); iii) Number of citations of an article; iv) Abstract status; v) If article assessed to be not relevant based on review of the abstract and title. Duplicates and retractions were removed. The core filter used for this US case study was on the country field for reference in title, keyword and abstracts and not country affiliation.
Information sources	6	Specify all databases, registers, websites, organisations, reference lists and other sources searched or consulted to identify studies. Specify the date when each source was last searched or consulted.	SCOPUS database searched using single key word (corruption) to create a primary data source for the systematic review tool. Date of download was 26 October 2023. Three files were downloaded due to file size limitations based on year (1831-2015, 2016-21 and 2022-26 October 23).44,094 citations were included. SCOPUS sources list was downloaded on 22 November 2023. Journal Citescores for 2019 and 2020 downloaded on 26 November 2023 from researchgate.net (DOI:10.13140/RG.2.2.25577.31844). Citescore 2022 was provided by ELSEVIER by email on 28 November 2022. Scopus fiscal space search for "fiscal space" word search included on 26 May 2024, and a full Scopus Update performed on 02 Nov 2024 alongside inclusion M. Stephenson Corruption database provided by Joseph Pozsgai <jpozsgai@hus.osaka-u.ac.jp>. Duplicates detected and filtered out using 4 stage algorithm (1. Author, Title, Year, 2. DOI, 3, Title only, and 4. DOI or Title).

Section and Topic	Item #	PRISMA 2020 Checklist item	Status
Search strategy	7	Present the full search strategies for all databases, registers and websites, including any filters and limits used.	Word search inclusion and exclusion lists established based on expert opinion and supplemented with additional words that came up during the review. To help reduce the number of articles for review the Citescore rating of journals was used (exclusion of lower quintiles were examined and assessed (very sensitive) - but this biased against niche journals and promoted high citation journals in certain fields like health. The number of citations of an article was assessed to determine impact on number of eligible articles (also very sensitive). Articles without an abstract were also reviewed for exclusion (tbc). During review, any articles that were assessed to be not relevant as a result of a reading of the abstract, were also excluded. Various forms of sensitivity analysis was also conducted to assess impacts on number of eligible articles for detailed review. Impacts of exclusion criteria based on ASJC subject theme was also assessed. A multi-tiered tagging systems was also developed. The tagging system was done manually to group the publication based on an emerging theme. Multiple tags were separated by "-" character to enable downstream separation of tags in an online tool. **Final version used in review paper will be reported**
Selection process	8	Specify the methods used to decide whether a study met the inclusion criteria of the review, including how many reviewers screened each record and each report retrieved, whether they worked independently, and if applicable, details of automation tools used in the process.	A tool was developed to help with the systematic review. It was based on power bi interfacing with CSV files (and converted to Excel files) downloaded from SCOPUS. Initially, all search criteria was performed in Power BI. However, that approach had a big impact on speed of the tool. It was then decided to do word searching (inclusion criteria) to be done outside and in Excel, which proved successful. Reviewers of inclusion and exclusion criteria include the PhD candidate and two supervisors.
Data collection process	9	Specify the methods used to collect data from reports, including how many reviewers collected data from each report, whether they worked independently, any processes for obtaining or confirming data from study investigators, and if applicable, details of automation tools used in the process.	As above
Data items	10a	List and define all outcomes for which data were sought. Specify whether all results that were compatible with each outcome domain in each study were sought (e.g. for all measures, time points, analyses), and if not, the methods used to decide which results to collect.	All SCOPUS Literature search fields and SCOPUS Sources Fields. Source and literature search databases were linked via ISSN. Citescore for journals were linked to SCOPUS sources dataset via Source record ID.
	10b	List and define all other variables for which data were sought (e.g. participant and intervention characteristics, funding sources). Describe any assumptions made about any missing or unclear information.	Article without abstracts were excluded. Unclear abstracts that were considered to have important insights were reviewed in detail using SCOPUS.
Study risk of bias assessment	11	Specify the methods used to assess risk of bias in the included studies, including details of the tool(s) used, how many reviewers assessed each study and whether they worked independently, and if applicable, details of automation tools used in the process.	Risk of bias managed in close consultation with PhD supervisors.
Effect measures	12	Specify for each outcome the effect measure(s) (e.g. risk ratio, mean difference) used in the synthesis or presentation of results.	NA
Synthesis methods	13a	Describe the processes used to decide which studies were eligible for each	Categorisation criteria established based on expert opinion through review of abstracts. For the

Section and Topic	Item #	PRISMA 2020 Checklist item	Status
		synthesis (e.g. tabulating the study intervention characteristics and comparing against the planned groups for each synthesis (item #5)).	systematic review of systematic reviews on corruption, a four tiered system was adopted (i.e. Systematic Review Type, Corruption Area, Theme, and sub/theme and/or country).
	13b	Describe any methods required to prepare the data for presentation or synthesis, such as handling of missing summary statistics, or data conversions.	34 additional columns under 5 thematic areas were added to the SCOPUS data excel files. These included: i) 1 tagging multi-category field (fields separated in Power BI); ii) 1 Consolidated Key Fields column (title, abstracts, author and Scopus keywords); iii) 15 word searches for each review areas: 11 FTM areas and 4 general areas (systematic review of systematic reviews, measuring corruption, nexus - of politics efficiency and corruption, and specific countries); and another 15 word searches to produce single word search categories; iv) a sequential word search category field; and v) Source file identification field. Search word order lists were produced in excel and imported to Power BI for field relationship linking. Inclusion and exclusion word terms were listed in Excel and imported to Power BI. SCOPUS data set fields for affiliations were split to create country affiliation fields. Country code dimension table also introduced. Country codes were assigned through data matching techniques. Affiliation fields that were not matched automatically were matched manually where possible (**still some to do**). A search for countries included in abstracts, titles or keywords was also included as way to detect if the article was about a certain country. SCOPUS dataset fields for authors was split and then unpivoted to allow filtering and league table production by author, with refiltering in certain reports/visuals to eliminate double count problems.
	13c	Describe any methods used to tabulate or visually display results of individual studies and syntheses.	Power BI was used to tabulate and visually display results. Results posted on a website.
	13d	Describe any methods used to synthesize results and provide a rationale for the choice(s). If meta-analysis was performed, describe the model(s), method(s) to identify the presence and extent of statistical heterogeneity, and software package(s) used.	Word cloud method used to assess frequency of important words. Detailed review of papers was based on three criteria: i) most cited papers; ii) most published authors; and iii) papers picked up during abstract review as of particular interest or relevance to the follow-the-money, nexus and rules of the game concepts. **Sentiment analysis under consideration.**
	13e	Describe any methods used to explore possible causes of heterogeneity among study results (e.g. subgroup analysis, meta-regression).	NA
	13f	Describe any sensitivity analyses conducted to assess robustness of the synthesized results.	Sensitivity analysis of exclusion criteria performed. **Report results??**
Reporting bias assessment	14	Describe any methods used to assess risk of bias due to missing results in a synthesis (arising from reporting biases).	Review with supervisors. Possibility of perception of bias problems by using the FTM corruption cycle conceptual framework noted. Considered an acceptable bias given the nature of the PhD thesis as long as it was disclosed.
Certainty assessment	15	Describe any methods used to assess certainty (or confidence) in the body of evidence for an outcome.	NA
RESULTS			
Study selection	16a	Describe the results of the search and selection process, from the number of records identified in the search to the	44,110 abstracts down to **x for x areas.**

Section and Topic	Item #	PRISMA 2020 Checklist item	Status
		number of studies included in the review, ideally using a flow diagram.	
	16b	Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded.	TBC
Study characteristics	17	Cite each included study and present its characteristics.	TBC
Risk of bias in studies	18	Present assessments of risk of bias for each included study.	TBC
Results of individual studies	19	For all outcomes, present, for each study: (a) summary statistics for each group (where appropriate) and (b) an effect estimate and its precision (e.g. confidence/credible interval), ideally using structured tables or plots.	TBC
Results of syntheses	20a	For each synthesis, briefly summarise the characteristics and risk of bias among contributing studies.	TBC
	20b	Present results of all statistical syntheses conducted. If meta-analysis was done, present for each the summary estimate and its precision (e.g. confidence/credible interval) and measures of statistical heterogeneity. If comparing groups, describe the direction of the effect.	TBC
	20c	Present results of all investigations of possible causes of heterogeneity among study results.	TBC
	20d	Present results of all sensitivity analyses conducted to assess the robustness of the synthesized results.	TBC
Reporting biases	21	Present assessments of risk of bias due to missing results (arising from reporting biases) for each synthesis assessed.	TBC
Certainty of evidence	22	Present assessments of certainty (or confidence) in the body of evidence for each outcome assessed.	TBC
DISCUSSION			
Discussion	23a	Provide a general interpretation of the results in the context of other evidence.	TBC
	23b	Discuss any limitations of the evidence included in the review.	TBC
	23c	Discuss any limitations of the review processes used.	TBC
	23d	Discuss implications of the results for practice, policy, and future research.	TBC
OTHER INFORMATION			
Registration and protocol	24a	Provide registration information for the review, including register name and registration number, or state that the review was not registered.	NA
	24b	Indicate where the review protocol can be accessed, or state that a protocol was not prepared.	TBC
	24c	Describe and explain any amendments to information provided at registration or in the protocol.	NA
Support	25	Describe sources of financial or non-financial support for the review, and the role of the funders or sponsors in the review.	PhD - DCU, Ireland. Company of PhD Candidate (AFI)
Competing interests	26	Declare any competing interests of review authors.	PhD Candidate is also director of AFI
Availability of data, code and other materials	27	Report which of the following are publicly available and where they can be found: template data collection forms; data extracted from included studies; data	Excel source data and power BI to be made available online. Power BI currently available at: https://artificialfiscalintelligence.com/powerbi/sr-corruption-pfms/

Section and Topic	Item #	PRISMA 2020 Checklist item	Status
		used for all analyses; analytic code; any other materials used in the review.	

Table 3. Risk Data Coverage for United States by Year and Source

Country	AML	BTI	CPI	CPIA	Gender	MAPS 2009	MAPS 2018	OBI	Other	PEFA 2011	PEFA 2011 Annex	PEFA 2016	RoLI	SCI	SPI	WGI
United States																
1996																WGI
1998																WGI
2000																WGI
2002			CPI													WGI
2003			CPI													WGI
2004			CPI												SPI	WGI
2005			CPI					OBI							SPI	WGI
2006			CPI					OBI							SPI	WGI
2007			CPI					OBI							SPI	WGI
2008			CPI					OBI							SPI	WGI
2009			CPI					OBI							SPI	WGI
2010			CPI					OBI							SPI	WGI
2011			CPI					OBI							SPI	WGI
2012	AML		CPI					OBI							SPI	WGI
2013	AML		CPI					OBI							SPI	WGI
2014	AML		CPI					OBI							SPI	WGI
2015	AML		CPI					OBI					RoLI		SPI	WGI
2016	AML		CPI					OBI					RoLI		SPI	WGI
2017	AML		CPI					OBI					RoLI		SPI	WGI
2018	AML		CPI					OBI					RoLI		SPI	WGI
2018 Pro												PEFA 2016				
2019	AML		CPI					OBI					RoLI		SPI	WGI
2020	AML		CPI					OBI					RoLI		SPI	WGI
2021	AML		CPI					OBI					RoLI		SPI	WGI
2021 Pro												PEFA 2016				
2022	AML		CPI					OBI					RoLI		SPI	WGI
2023	AML		CPI					OBI					RoLI		SPI	WGI
2024	AML												RoLI			

Annex C: SLR on Corruption and the US

A summary of SLR on corruption and the US, including the articles with the most citations either total or average annual are as follows:

i. 14 articles brought up issues with budgets;
   - The most relevant article found that corruption reduces state budget allocations on higher education, prisons and social welfare (Cordis, 2014);

ii. 19 presented matters of procurement;
   - The most cited procurement-focused study (35) revealed that US airports are negatively impacted by corruption and will outsource in-house labour as a result (Yan and Oum, 2014);
   - One paper reviewed the history of procurement in the US from its founding, highlighting the largest ever US procurement investigation at the time, being the Operation III Wind, which resulted in 90 separate convictions (Branstetter, 2005);
   - Three faces of privatisation in US and UK are argued in one article to be: i) naive liberal capitalist argument that privatisation is efficient; ii) an exercise of power, which results in corruption, inequality and homelessness; and iii) a hegemonic mission to change the balance of powers (Samson, 1994);

iii. 13 raised audit and oversight issues, none of which identified audit as a source of corruption or political manoeuvring in itself[1];
   - The most cited audit paper (128) used confidential US tax audit data to find that corporations with owners that originate from countries with much higher perceptions of corruption evade more US tax than the typical corporate tax payer (DeBacker et al., 2015);
   - Foreign Corrupt Practices Act (FCPA) penalties for use of bribery in foreign contracts are found to be generally avoided by big firms, which is called "too big to debar" (Stevenson and Wagoner, 2011)[2];
   - A study on the relationship between audit behaviour and corruption in the USA found that corporations headquartered in more corruption-prone areas pay

[1] One paper argued that education of US auditors and accountants was needed to help them recognize and understand fraud (Peterson, 2004).
[2] SLR tool tags this article as a procurement or revenue, but is most relevant as audit or accountability.

higher audit fees and have longer audit reports with more irregularities and qualifications (Xu et al., 2019);

iv. 29 had payroll and personal concerns;

- The most cited paper (120) argued that higher levels of patronage in the US was one the three drivers of lower social capital/contract in the US compared to Scandinavian countries, the other two being higher inequality and fairer and more universal social protection programmes (Rothstein and Stolle, 2003)
- The second most cited paper (47) reviewed how political parties in the 19th century in UK and US competed by hiring agents to bribe and indulge voters to get into power and how countering legislation developed during that time (Camp et al., 2014) .
- Two reviews were found on civil service reform in the US that covered all levels of the general government sector from federal, state to local, with a focus on reforms to the merit system and partisan incentives (Argyle, 1982; Bowman and West, 2017);
- Four of the 29 papers were devoted to police personnel corruption raising issues of: i) failure of reform of police sanction policies, screening, and training (Johnson and Cox, 2004); ii) failures of efforts to enhance integrity (Schafer and Martinelli, 2008); iii) US police cultures that have perverse impacts on corruption (Boyne, 2017); and iv) the common practice of hiring out uniformed police officers to the private sector to increase revenue earnings for shadow police networks (O'Hara and Sainato, 2015);

v. 70 had a focus on revenues;

- The paper with the third highest average annual citation[3] (6 average with total 57) modelled the relationship between tax, corruption and growth in the US, and found that corruption reduces growth and the optimal level of taxation (Aghion et al., 2016)
- The fourth highest average annual cited paper (5 average with total of 44) established a US Treasury patronage indicator by reviewing the value of changes in the values of certain stocks related to the appointment process of Timothy Geithner as Treasury Secretary (which overseas tax policy and

[3] The two higher citations were already noted in other sections (Hines, and DeBackker et al)

administration). It found that firms that Geithner had known prior associations saw their stock prices increase on leaked and formal announcements of the nominee, and also saw stock prices fall when his appointment might fail due to personal tax issues (Acemoglu et al., 2016).

- A study into the relationship between corruption and tax avoidance in the US showed a strong positive relationship (Al-Hadi et al., 2022), while another showed a risk premium in the form of higher interest rates are linked to states with higher levels of corruption (Depken II and Lafountain, 2006);

vi. 12 brought up accounting systems;

- One paper modelled the impact of Sarbanes-Oxley Act (2002), which was passed after several highly publicised corrupt accounting scandals. The model looked at the impact of whistleblower provisions, aimed at providing protections to employees inside companies that were aware of corrupt accounting and audit practices and were considering alerting the authorities. The model predicted that there would be more whistle-blowers if employer retaliation could be mitigated by the Act (Bame-Aldred, et al., 2007).
- The most cited paper not already covered above emphasised the FCPA[4] including the Institute of Internal Auditors (IIA) and the American Institute of Certified Public Accountants (AICPA) had an impact on the accounting and auditing profession as well as international organisations (Vanasco, 1999);
- Effects of corrupt accounting in the public sector was described in a paper on San Diego, which author noted was headlined by the New York times as being the "a Kind of Enron by the sea" due to the links between political corruption and fraudulent financial statements (Sparrow, 2010);
- One book made the argument that accountants were leading social reformists claiming that the "most universally suggested and accepted remedy for the overt abuses which accompanied the rise of financial capitalism was the publicity of corporate accounts" (Zeff, 2020).

vii. 21 had issues related to either asset or debt management;

- The most cited paper (both total 622 and average annual 31) found that lending went up significantly in election years around the world by banks that had high

[4] Of the 511 articles in the SLR 19 referred to the FCPA.

levels of public assets (42% of total bank assets). At the time these were all government owned bank and the US did not have many (Dinç, 2005). A similar finding was raised by Bermpei et al. (2021), which focused more on information asymmetries impacts, with finding that corruption has a negative impact on lending by US banks. With the discovery and use of new forms of Quantitative Easing (QE), the definition of government ownership would need to be reviewed and implications for this study on the US could be different. Another paper proposed a link between the culture in Banks and tolerance for corruption (Bermpei et al., 2024). Another paper found a link between high corrupt US regions and high cash holdings of banks(Jayakody et al., 2023).

- One paper provided examples of money laundering methods used in the US, which often involved balance sheet items both assets and liabilities (e.g. the use of fictious loans and assets) and the methods used to corrupt professionals (Kennedy, 2005);
- The readability of financial statements including balance sheets was found to be lower for firms in corrupt regions and more competent managers were able to obfuscate information in annual reports (Xu et al., 2022).
- Debt forgiveness by the US was raised on one paper, which argued that countries with good governance performance should be rewarded with higher shares of total debt forgiveness (Neumayer, 2002). Another paper argued about the problems of debt relief and moral hazard could be mitigated through the use of revocable debt relief instruments that establish debt relief as condition asset for the lender and a condition liability for the borrower (Laing, 2022).

viii. 109 articles[5] were related to accountability institutions in some way:

- Operation Greylord was reviewed in 1988 as being the biggest investigation into corruption within the judiciary in US history at that time. A key point raised was that such serious investigations by an incoming government into the behaviour of the previous government was very rare and likely to reflect a bipartisan deal rather than cleaner governments (Bensinger, 1988).

[5] Of the 109 article in the accountability theme there were 50 separate paper referring courts, 29 police, 10 on the constitution, 9 on congress (and 3 on senate and 2 on parliament) and 6 on banks.

- The highest cited (44) paper on corruption and prosecutions looked at plea bargaining, courtroom communities, and public corruption prosecution (Gordon and Huber, 2009);
- Poor oversight in disaster relief was explored in paper focused on Hurricane Katrina, with the author describing disaster relief as a poor public good due to in part weaker incentives to manage resources efficiently (Shughart II, 2011).
- One cited (20 total average 4 p.a.) paper argued that the US is suffering from poor accountability and oversight or "constitutional rot" through which republics stop being representative in the pursuit of the public good (Balkin, 2020).
- A negative relationship was found between political polarisation and corruption (Melki and Pickering, 2020). This indicates that there might be a "goldilocks" level of bipartisanship in democracies in that too much of it can mean collusion and too little may mean chaos.
- A review of ten US inspector general offices found that independence is necessary but insufficient to protect integrity of the offices and suggests alternative factors are at play (Segal, 2010).

Other SLR Findings

No papers were detected on the use of corrupt commitment control practices in the US, where the commitment control systems were used as a gateway to support political manoeuvres or actions that had corrupt intent. There were also no papers relating to corrupt US government contract management systems, after the award or contracts, nor corruption in the US government invoice verification and payment system.

Publication rate on corruption in the USA had been slow up to the turn of the century, with the number of annual publications increasing to around twenty (20) from 2010 onwards (see Figure 2 on page 95).

The paper with the most citations (772 at the time of writing) was entitled "How much is a seat on the UN Security Council worth?"(Kuziemko and Werker, 2006). The main finding was that US aid increases by 59% and UN aid by 8% (mainly via UNICEF) when a country gets a seat at on the Council. The second most cited relevant paper (549) was on the effects on American business after Foreign Corrupt Practices Act of 1977 (Hines, 1995). The paper found that the legislation had a negative impact on the competitiveness of US firms without having

any impact on the level of bribery. The third most cited paper (424) was on "Cosmetic compliance" (Krawiec, 2003), which argued that there was limited evidence that internal compliance structures had any impact on improving governance and reducing corruption. The fourth most cited (231) was on "the injustice of inequality"(Glaeser et al., 2003). This paper found that legal, political and regulatory institutions were used by the wealthy for corrupt intent. The paper provided historical evidence from various times including the Gilded Age, and countries such as the US.

The author with the most articles on corruption in the USA is Goel with 12 publications. His three most cited papers were on contagious corruption in the US (Goel and Nelson, 2007), government fragmentation, decentralization and corruption in the US and Europe (Goel and Nelson, 2011) and insurance fraud and US corruption (Goel, 2014).

A specific search for the issues related to trust in the US corruption dataset was also undertaken. 42 Articles were found, of which the three most cited papers were on: i) US regulatory policy and trust (Dincer and Fredriksson, 2018), which found that environmental policy was less stringent in the presence of low levels of trust; ii) the role of institutional trust (Ciziceno and Travaglino, 2019), which analysed World Value Survey data to find some evidence that corruption has a negative impact on quality of institutions, inequality and growth; and iii) effects of accounting and audit quality on World Bank loan programs (Lamoreaux et al., 2015), which found that World Bank maybe ignoring accounting and audit quality concerns in countries where US has strategic interests. No papers were found on the trend analysis of trust and corruption in the US, and only one paper that analysed World Value Survey data.

Corruption Books

Seven books authored by seven famous academics on the specific topic of Corruption in the USA were detected as part of the SLR. Johnson, Dincer, Chayes, Stephenson, Pomante and Thompson all have had made influential contributions. Brief summaries are below:

1. Corruption in America: A Fifty-Ring Circus by Dincer and Johnston

This book examines corruption in all fifty states of the USA, using three proxy measures to study both legal and illegal forms. They explore the causes, consequences, and implications of corruption for issues like racial inequities, public health, and environmental concerns. Emphasizing citizen participation and trust in political processes, the authors discuss

institutional change and democratic revival challenges to build a more equitable society. (Dincer and Johnston, 2025)

2. **2017 Right and Wrong in American Politics: Popular Conceptions of Corruption by Johnson**

This book argues that understanding social views on corruption and misconduct in politics is crucial as these perceptions influence trust in elites, political engagement, and the success of reforms. Johnson recommends that reformers should consider public ethics when creating anticorruption measures. He warns that corrupt opportunities often arise for public and private actors, making corruption a persistent issue in politics. (Johnston, 2017a)

3. **On Corruption in America: And What Is at Stake by Saray Hayes**

In her book, Sarah Chayes argues that the United States exhibits corruption similar to the world's most corrupt nations. She defines corruption as a collaboration among government officials, private-sector interests, and criminals to maximize their benefits rather than serving the public. Chayes traces this corruption from the Gilded Age through FDR's New Deal, Reagan's deregulation, Clinton's political favours, and Trump's network of corruption. She explains how these systems operate legally, influence government, and impact society, especially when overlooked by the wealthy and educated. (Chayes, 2021)

4. **Taming systemic corruption: The American experience and its implications for contemporary debates by Cuèllar and Stephenson**

This book examines the U.S. experience with corruption from 1865 to 1941, challenging common beliefs about combating corruption in developing countries. It argues that the US is an example of how entrenched corruption can be overcome, transitioning from systemic corruption to one where it is rare. This transition is argued to be incremental, uneven, and slow and occurred with government expansion. The book emphasizes the point that anti-corruption measures can be very effective in corrupt societies as revealed by US history, where a mix of institutional reforms, like civil service reform, and enforcement efforts and broader political norm shifts were seen as crucial. (Cuèllar and Stephenson, 2022)

5. **Scandal and Corruption in Congress (edited by Pomante)**

This book provides an overview of the history of corruption within Congress. The book examines policies designed to prevent corruption, instances where Congress has concealed

unethical behaviour, the consequences of being discovered, and a comparison of corruption in the USA with other countries. Additionally, several chapters cover recent developments, including the impact of Citizens United and the #MeToo movement. (Pomante, 2022)

6. **Dennis Thompson** (Thompson, 1995)

In this influential book on curbing corruption in congress, Thompson argues for stronger ethics committees and a new quasi-independent body to improve enforcement. He makes the point that electoral and judicial processes are insufficient to effectively deal with corruption in congress. He provides recommendations for enhancing congressional ethics procedures and practices. This book focuses on institutional corruption, which Thompson explains to involve conduct considered acceptable under certain conditions as part of a representative's duties. It discusses how members are expected to solicit campaign contributions and assist constituents with government issues, but some methods can lead to institutional corruption. The focus is on addressing issues of implicit understandings, ambiguous favours, and political advantage, rather than issues that were commonly discussed at time, such as bribery, extortion, and personal gain.

Trends in Trust in US Institutions

In the absence of articles on trend analysis of levels of trust in the US corruption database, rapid analysis of World Value Survey data was undertaken. The analysis found that overall trust in US institutions fell by over 30% since 1984, driven by significant declines in trust in Congress (71% since 1984), Political Parties (50% since 2004 from a very low base) and Civil Services (30% since 1923) (see Figure 166 on page 232).

Annex D: SLR on Definitions of Corruption

The top five definitional papers using the broad search criteria appreciated the difficulty of defining corruption, partly due to the difficulty in distinguishing what corruption is and what it is not. These papers raised issues of: i) the use of ***guanxi***, which is a type of network of mutually beneficial relationships, which may or may not be corrupt (Dunfee and Warren, 2001) – 305 citations; ii) business lobbying in Russia and questions if it is a ***legal form*** of exchange or a form of corrupt state capture (Frye, 2002) – 294 citations; iii) Jain explains the difficulties of defining corruption but offers up a consensus view where "***power*** of public office is used for ***personal*** gain in a manner that contravenes the ***rules*** of the game" and then presents three types of corruption (grand, bureaucratic, and legislative) (Jain, 2001) – 275 citations; iv) broad organisational misconduct and the role of "social-control agents" (Greve et al., 2010); and v) definitions and methods of electoral corruption (Birch, 2012) – 242 citations.

Authors that had three or more publications in the broad search criteria and had citations of over 100 in total were also reviewed. Johnson, Rothstein, Kaufmann and Philp were the authors that met this criterion. The two papers in the broad definition search from Rose-Ackerman were also included in the review due to her standing.

Johnson had five papers with citation count of 133 with the most cited paper (112) grappling with the challenge in China on ***how to "define legitimate relationships*** *and boundaries between personal interests and official power*" (Hao and Johnston, 1995). His second most cited (13) paper in this search focused on the problems of measuring corruption including the problems of definitions (Johnston, 2017b). His third most cited paper (5) emphasized the "social definition of corruption … and … popular standards of right and wrong" (Johnston, 2017a).

Rothstein had three papers with citation count of 139 with most cited paper (94) focusing on the idea of impartially basing it on a competing concept of "quality of government" and defining it to be "the impartiality of institutions that exercise government authority" (Rothstein and Teorell, 2008). The implication being that corruption was a situation where government institutions were not being impartial.

Kaufmann had three papers with citation count of 135 with his most cited paper (135) ***separating corruption into legal and illegal forms***. The paper also presents a conceptual

framework and model that produces three equilibriums: i) illegal corruption with elites having no incentives to limit corruption; ii) legal corruption where costs must be incurred to be successful; and iii) no corruption (Kaufmann and Vicente, 2011).

Philp had five papers with citation count of 103 with most cited paper (33) raising the importance of corruption definitions to the peacekeeping field and arguing that anti-corruption should not be a major priority for peace building (Philp, 2008). The second (31) and fourth (10) most cited paper/chapter explored the disputes over the meaning of political corruption and the links to ***healthy political practices and how rules are subverted*** (Philp, 2017, 2012) . His third most cited paper (28), Philp presents a Hobbes-based view that definitions can have two dimensions, one on the meaning, the other as a tool to construct a description (Philp, 2014).

Rose-Ackerman had two papers with citation count of 13 with most cited paper (7) argued that there was a missing "crisp" definition of corruption and presented two definitional forms: i) corruption as a deviation from a standard; and ii) corruption associated with "system-level attributes" such as public or private interest (Rose-Ackerman, 2017a). Her second most cited article in the SLR presented a consensus definition as "misuse of public power for private or political gain" (Rose-Ackerman, 2017b).

Of the 54 papers that had definition in their title a review of the papers that had 30 or more citations was undertaken. Seven articles fell in this criterion from Peters and Welch (122 citations), Gaal et al (118), Kurer (100), Agnafors (54), Rose (40), Gorta and Forell (36) and Ko and Weng (34). The following summarises the papers in the order they were published.

Peters and Welch present a conceptual framework to help define corruption around four components of a corrupt act: i) donor; ii) the favour; iii) the official; and iv) pay-off (1978).

Gorta and Forell (1995) ran a survey of 1,300 public servants in New, South Wales, Australia to find that views of corruption were diverse but views of which impacts on the type of actions people would take action on (whistleblowing).

Kurer (2005) deals with the definition issue by highlighting the works of Heidenheimer, Johnston and Levine focusing on their distinctions of corruption being public opinion, public office and public interest. The paper then raises the idea of the impartiality principle, used later by Rothstein and Teorell (2008).

Gaal et al (2006) is sourced in an SLR of definitions of informal payments. The SLR found three definitions that are representative of the 61 different definitions discovered. The authors of the SLR argue that the definition proposed by Gaal et al in 2006 is the best candidate for a commonly accepted definition: "*A direct contribution, which is made in addition to any contribution determined by the terms of entitlement, in cash or in-kind, by patients or others acting on their behalf, to health care providers for services that the patients are entitled to*". (Chereches et al., 2013, p. 109; Gaal et al., 2006)

KO and Weng (2011) reviewed definitions of Chinese corruption to find that the argument that Chinese definitions were different to Western definitions was false with similarities to the common definition of "abuse of public office for private gain".

Agnafors (2013) argues that there is a lack of an accepted definition for quality of government and proposes that a definition "must be consistent with the demands of a public ethos, the virtues of good decision making and reason giving, the rule of law, efficiency, stability, and a principle of beneficence".

Rose (2018) presents the case that current definitions and understanding of corruption are not adequate. Via a critical analysis of definitions the study finds much disagreement on what behaviours should be deemed as corrupt.

Annex E: Classic Example of the Difference Between Corruption and a Political Manoeuvre

An example is provided to clarify the distinction between corruption and political manoeuvring. The example is considered to be one of the most significant political achievements in modern history, led by US President Abraham Lincoln.

Here is an excerpt from John B. Alley's writing in Rice's book "Reminiscences of Abraham Lincoln":

> *"Mr. Lincoln was a thorough and most adroit politician as well as statesman, and in **politics always adopted the means to the end**, fully believing that in vital issues, " success was a duty."*
>
> *In further illustration of this feeling and sentiment, I need only refer to his action and conduct in **procuring the passage** of the constitutional amendment abolishing slavery. It required a two thirds vote of Congress to enable the amendments to the Constitution to be sent to the legislatures for ratification, and there were two votes lacking to make two-thirds, which, Mr. Lincoln said, " **must be procured**." Two members of the House were sent for and Mr. Lincoln said that those two votes must be procured. When asked, "How?" he remarked: " I am President of the United States, clothed with great power. The abolition of slavery by constitutional provision settles the fate, for all coming time, not only of the millions now in bondage, but of unborn millions to come — a measure of such importance that those two votes must be procured. I leave it to you to determine how it shall be done; but remember that **I am President of the United States, clothed with immense power, and I expect you to procure those votes**." These gentlemen understood the significance of the remark. The votes were procured, the constitutional amendment was passed and slavery was abolished forever.*
>
> *Some, I know, would criticise Mr. Lincoln's methods. But he was a thorough politician, and believed most fully **that in this case the consequences resulting from his action justified him in resorting to almost any means to procure for that down-trodden race such a boon**."* (Rice, 1886, pp. 585–586)

From this recollection, it is clear that President Lincoln was undertaking a political manoeuvre to secure the abolishment of slavery for "all-coming time". The methods used, however, could easily be considered corrupt if seen in isolation of the political manoeuvre and in absence of knowledge of the intent. To be sure, the recollections of John B Alley, make it clear the instructions of the President were crystal: "these gentlemen understood the significance of the remark". The intent, in President Lincoln's view, was clearly in the public interest albeit through potentially unethical methods.

To exercises his executive power to achieve the abolishment of slavery the President used methods that drew on his "immense powers", much of which are enshrined in legislation related to public finance systems. Examples include the ***budget*** (power to allocate resources to certain projects and parties), ***payroll and human resources*** (power to appoint people to certain high ranking or high corruption risk positions such as customs commissioners), ***audit*** (power to undertake deep financial investigations over recalcitrant secretaries, officials and opposition stakeholders), and ***revenue*** (power to tax and charge different parties differently).

Two underlying and competing concepts emerge from this distinction of corruption and political manoeuvring. These are the ideas that in politics and in government:

i. The ends justify the means; or that
ii. People should pursue just means for just ends.

No matter what the position on these two concepts, hopefully there will be some consensus that a difference exists between corruption and political manoeuvring when motives, intent and political situations are taken into consideration. This can pave the way for a more informed debate within cabinets during budget hearings, not just on inefficiency and corruption, but also on the cost-effectiveness of past, present and proposed political manoeuvres. These costs can remain in the budget for years, long after the original deal was done, creating a growing mountain of toxic budget waste as all the political manoeuvres start to pile on top of each other. This can be the case whether or not they are failed manoeuvres, only partially successful or just too costly for what they delivered.

Additional research on the differences between political manoeuvring and corruption is planned. The research will draw on famous case studies including President Richard ***Nixon*** (e.g. the private health insurance policy); Chicago Governor Rod ***Blagojevich*** (e.g. selling

seats and within party political warfare); and Executive Deputy Secretary to New York Governor Andrew Cuomo, Joseph ***Percoco*** (e.g. honest services wire fraud).

Drawing on these definitions of what corruption is and isn't, a conceptual framework is also presented on how any new government may tackle inefficiencies created by and/or left by the previous administration. It is based on the idea of how new governments choose to distinguish themselves from the previous administration in three key interrelated areas of: i) policy; ii) patronage; and iii) performance. This nomenclature also helps to distinguish between the different types of corruption and inefficiencies that can be detected during a budget process.

This will be explored in more detail in the subsequent paper on tools to help curb corruption and other inefficiencies through budget process. It should be noted though the interconnectedness of these three areas of policy, patronage and performance. For example, policy can be used as cover for patronage, which can have a negative impact on performance, which can then confuse policy development. All three of which can leave traces of inefficiency, some obvious in basic efficiency metrics and some not so obvious. These are ready to be detected and dealt with through a budget process that targets inefficiency in all its forms. Fiscal space analysis and fiscal intelligence systems are two the tools that can support such a process.

Annex F: Summary of Theory and Methodology

There are three conceptual frameworks that underpin the methodology used to estimate the costs of corruption and other efficiency losses in the original methodology paper (Laing, 2024)**.** These are: i) Viewing Corruption Through a Public Finance Lens; ii) Costing Corruption and Other Inefficiencies; and iii) Presenting Corruption Within a Fiscal Space Context.

The first framework recognises the "three faces" of public finance systems, which can be effective at delivering efficient government, facilitating corrupt government, and/or supporting cost-effective political manoeuvres. Recognition of these three aspects of public finance is arguably a pre-condition for ensuring the system is dominated by two of the three faces and less of the corruption facilitation function.

The second framework was based on the idea that corruption and other efficiency losses are a function of risk within the different public finance systems and the amount of money controlled or flows through those systems. The costing equation in its simplest form is C = R x F. Where C is the costs of corruption and other efficiency losses, R is the systemic risk in a public finance system, and F is the level of funds flowing through the system.

The third framework presents corruption within the context of fiscal space, which once achieved allows corruption to be targeted systematically during the budget process. Fiscal space is defined as a government's ability to finance new higher priority policies without risking fiscal, economic, social and political instability. There are two types: i) ***Over time*** – which represents how much room to move over time given commitments and policies the government has already committed to (i.e. existing policy); and ii) ***Point in time***: How much room to move in a particular year and the different sources

The methodology adopts Heller's (2005) original four dimensions of fiscal space (see Figure 5 on page 99) being tax, deficits (balance sheet), grants (3rd party payers), and efficiency (including anti-corruption).

The metrics used in the model draw on common approaches to calculate three of the four fiscal space dimensions. For the revenue dimension, tax in US$ and as a percent of GDP is used, for grants, it is aid in US$ and as a percent of GDP, and for the balance sheet it is external debt in US$ and as a percent of GDP. For the fourth dimension, efficiency, it is the estimates of the losses from corruption and other efficiency losses in US$ and as a percent of GDP that

are calculated by the methodology presented in this paper. The fiscal space dimension equations are provided at Table 5 on page 99.

These four metrics establish the country level parameters used to calculate fiscal space and are readily available from public sources. These sources are: i) IMF GFS database for tax and debt; ii) OECD-DAC-CRS database for aid; iii) World Development Indicators (WDI) for GDP and foreign exchange rates; and iv) the database on the costs of corruption and other efficiency losses (Laing, 2024).

There are also four different parameters that set the fiscal space dimension threshold. One for tax being the percent of GDP being representative of tax take target for the country. The range that can be chosen is between 10% of GDP as very low tax take target up to 30% of GDP being a high tax take. Grants parameter is normally the level of donor aid as a percent of GDP for donor recipient countries. For the US, the grant/3rd party payer parameters were changed to have two types. One for all other OECD donors supporting a US-global aid-related strategic policy, where the thresholds are based on targets for other OECD donors disbursing aid as percent of GNI. The range being from 0.2% to 0.7% of other OECD countries' GNI. The other grant-3rd party payer parameter is for NATO contributions, where the range for other NATO countries being from 1% to 2% of NATO countries' GDP. The third parameter is for levels of debt. Depending on data availability, this can be either external debt or central government debt. For the US, the range is for external debt being from 35% to 125% of GDP. The final parameter is the for choice of discount to the inefficiency as a percent of GDP with a range from no discount to 80% discount.

Comparators

A core comparator used in the analysis of fiscal space is the G20 group of the nineteen biggest economies in the world. This is used to help determine if a fiscal space driver is relatively low or high, in comparison to other G20 countries. Five additional countries are included for interest (Ireland, New Zealand, Nigeria, Pakistan, and Philippines) forming the G20+5 group for this paper.

Twelve additional types of comparators are employed in the analysis of fiscal space to explore different contexts and dimensions. These are: i) Region of the world (e.g. North America), ii) Income Group (e.g. High Income Country); iii) Dominant Religious Group (e.g. Christian); iv) Populations groups (e.g. over 200m people), v) Corruption Perceptions (CPI)

quintile; vi) Natural Resource Dependency (natural resources as a percent of GDP); vii) Diversity or fractionalization based on race, religion and language (Greenberg, 1956; Loh and Harmon, 2010; Mauro, 1995; “Most Diverse Countries 2025,” n.d.); viii) Legal Tradition (e.g. anglophone) (Paulissen and Horncastle, 2024); ix) State Fragility (i.e. according to the index); x) BTI Democracy Status (e.g. effective democracy); xi) System of Government (e.g. presidential); and xii) Political Finance Regulations (Paulissen and Horncastle, 2024).

Data Sources

The sources of data used to calculate risk, estimate efficiency losses and calculate fiscal space are provided at Annex A: Sources of Data on page 37.

Annex G: Fiscal Space, Tax and Some Other Comparators

Additional standard and novel benchmarking comparators are presented in this section on tax. These are: Region, Income Group, Dominant Religious Group, Populations groups, Corruption Perceptions (CPI), Natural Resource Dependency, Diversity (Fractionalization), Legal Tradition, State Fragility, BTI Democracy Status, System of Government, and Political Finance Regulations (RoPFI).

Tax and Regions

Global regional tax analysis has North America being the highest taxing in per capita terms (over $15k pp), Europe is highest taxing in terms of percent of GDPs (c25%). Sub-Sarhan Africa (SSA) is highest in terms of percent of revenues at over 80%. The big recent increase comes from South Asia in percent of revenue (see Figure 27). Further research is required to understand drivers, including data and country level.

Tax and Income Group

A clear positive relationship between taxes and income group can be seen in three of the four comparator metrics with higher income countries having highest tax takes as percent of GDP and much higher in per capita terms (see Figure 28). It is unclear when assessing as a percent of revenue. Low-income country growth is driven by an increase in number of low-income countries publishing general government data.

Tax and Dominant Religious Group

Figure 29 shows a clear relationship between taxes and certain religions. In nominal terms, Christian countries are outliers at almost $15t, followed by unaffiliated at around $5t. As percent of GDP, Jews, Christians and Unaffiliated have the highest, with Unaffiliated rising rapidly. Hindus, Folk and Muslims have the lowest. As a percent of revenue, the highest are Folk, Hindus, and Buddhists. No dominant group, Muslims and unaffiliated have the lowest. In per capita terms, Jew are highest and are outliers, followed by Christians and unaffiliated.

Tax and Corruption Perceptions

CPI groups were set up on based on quintiles, where high quintile is least corrupt on a perceptions basis, while low quintiles are more corrupt.

The top quintile of countries in the CPI raised by far the highest amount of taxes in three of four comparator metrics: nominally, percent of GDP and per capita (see Figure 30). The results are mixed as percent of total revenue.

Tax and Natural Resource Dependency

Natural resource dependency country groups were established. Groupings are: highly dependent if natural resource rents in the national accounts reflected 15% of GDP, moderate if between 10% and 15%, mildly dependent of between 5% and 10%, and not dependent if below 5%. A category was also created for countries and years without sufficient data (e.g. missing GDP or naturel resource rents levels).

Highest rates of resource dependency are shown to be linked to very low rates of tax collection in all four comparator metrics. Being not resource dependent raises by far the most taxes nominally, as a percent of GDP and in per capita terms (see Figure 31).

Tax and Diversity (Fractionalization)

Diversity groups (i.e. fractionalization in racial, religious and language terms) were set up on quintiles, where high quintile is more diverse than low quintiles.

There are mixed results on diversity. Mid to low diversity quintile groups raise the most taxes as percent of GDP and per capita terms but it varies. Highest quintile consistently have high tax takes as a percent of total revenue (see Figure 32).

Tax and Legal Tradition

Legal traditions (Paulissen and Horncastle, 2024) were bridged to countries and found that English legal tradition raises most revenue nominally. Scandinavian raises the most as % of GDP, total revenue and in per capita terms (see Figure 33).

Tax and State Fragility

Fragility groups was based on position in Fragile State Index 2022 (Top 10, Top 30 and Top 60).

Trend analysis reveals that fragility makes it difficult to raise taxes and that not being fragile raises by far most taxes in nominal and percent of GDP terms (see Figure 34).

Tax and BTI Democracy Status and Population Groups

BTI data was applied to taxation level review and found that effective democracies raise the most taxes in three of four comparator metrics used: nominally, as a percent of GDP and in per capita terms (see Figure 35). Results are mixed as a percent of total revenue.

The BTI review also looked trends in groups of populations with BTI dimensions; democracy status, Governance status and level of difficulty and were applied against dominant religious groups and CPI quintile (see Figure 36). Key findings are:

- **The big 7 countries with populations over** 200m are India & China (1.39b), US (0.34b), Indonesia (0.26b), Brazil & Pakistan (0.21b) and Nigeria (0.20b)
- **Most of the world are governed by hard-line autocracies and defective democracies** that are rated weak or moderate governance standard with a moderate level of difficulty
- **In 2020 most of the world (4b) lived in countries that are in the mid CPI quintile.**
- **Christians (31%), Muslims (25%) and Unaffiliated (16%) and Hindus (15%%) are the dominant religions** in 2020. By 2050 PEW Research projections are Christians (31%), Muslims (30%) and Hindus (15%) and Unaffiliated (13%)

Tax and System of Government

A review of taxes and the system of government was undertaken and found that parliamentary and presidential systems raise the most taxes nominally, as percent of GDP and per capita terms (see Figure 37). There are mixed results as percent of total revenues.

Tax and Political Finance Regulations

The review found that strong regulation of political finance is associated with high tax revenues but low as percent of GDP and as a share of revenues. This was found using ROPFI bridging tables (Paulissen and Horncastle, 2024) for levels of regulation of political (electoral) finance, which was used to review relationship with tax collections. Unregulated systems raise the most in per capita terms (on average), though these were generally small island developing stats (SIDS) and Switzerland.

Customs and Tariffs

Trend analysis of the 50 years between 1973 and 2023 found slow nominal growth in US tariff revenues up to 2018, which then rapidly increased in 2021 and then falls in 2023. Tariff collections fell dramatically from 1% of revenue or 0.3% of GDP in the 80's and 90's to 0.6% of revenue and 0.2% of GDP and was relatively stable throughout the period to 2018. Tariff collections increased to 1.2% of revenue and almost 0.4% of GDP in 2019/2022. In the US, only the federal government has powers to levy tariffs. No tariff revenues are reported as collected at lower levels of US general government.

The review of G20+5 group found that Russia, China and USA are outliers in the collection of nominal tariff revenues (see Figure 40). Russia was collecting well over $150b p.a. in tariffs in the 2010's, equivalent to around 7% of GDP and 18% of revenue. In same period the US collected $37b or 0.2% if GDP and 0.6% of revenue. The four countries that collect the most tariffs on a per person basis in 2022 were Australia and NZ ($450pp), Russia ($350) and US ($310).

A review of geopolitical incidence analysis of big market tariffs was also conducted using standard supply and demand methods. Figure 41 shows the impacts of an introduction of tariffs in a standard size market through a shift in the supply curve up and to the left. Demand for imported product is a standard downward sloping.

Tariff revenue collected is represented by the area: $P_tariff.P_received\ .A.D.$ = (F+H) = Lost consumer and producer surplus = Gain to government (which means the government can lower income taxes on citizens for any given level of expenditure). Deadweight Loss to the World is represented by the area ABD and producer surplus (i.e. similar to the idea of profits after costs) being the triangle above the supply curve and bounded by the price.

Incidence analysis has the exporting country as always being a loser. If the importer is subject to a world price (perfectly elastic supply), then complete loss of all producer surplus reflecting a no trade impact scenario. The lost sales revenue that covered costs of production in importing country has a negative impact on labour markets and economic growth in those countries. Domestic consumers in this scenario are however, not effected as they still receive the good at the world price from a different source.

Tariffs can be a net winner for the importing country government assuming competitiveness is maintained. The benefits come from transfer of producer surplus from the foreign producer and a transfer of consumer surplus (similar to the idea of benefits valued from consuming the good above what was paid), creating revenues and fiscal space, with potential for example, to lower taxes, pay off debt or increase spending in priority areas.

Citizens can be a mix of winners and losers, but citizens in the market for the tradeable good as a group always lose. Citizen losers are those that buy imports and who paid more for the foreign product compared to no-tariff scenario (tax on importing citizens). Certain citizens win. These are the citizens who didn't buy the import, or who paid less than the no-tariff scenario and were more than offset by tax reductions (subject to nature of tax cut). In the perfectly

inelastic supply (vertical supply curve shifting to left) then all consumer surplus is transferred to the government as revenue and the tariff is a full tax on import buying consumers.

There are big, dominant-single market issues in the US market. These include size and reserve currency trading. Tariff introductions can also introduce short term dynamics due to various factors such as price reductions by selling products at a loss (e.g. due to excess inventory conditions). Incentives for trade wars and risks of real wars are also present as are issues of ethical imperialism.

Tariffs are subject to the idea of "beggar thy neighbour". Adam Smith[6] theorized that trade would be good for relations between nations in peacetime but not during times of hostility, as can be seen here:

"**By such maxims as these, however, nations have been taught that their interest consisted in beggaring all their neighbours** … **That it was the spirit of monopoly** which originally both invented and propagated this doctrine cannot be doubted. ***The wealth of a neighbouring nation, however, though dangerous in war and politics, is certainly advantageous in trade. In a state of hostility it may enable our enemies*** to maintain fleets and armies superior to our own; but in a state of peace and commerce it must likewise enable them to exchange with us to a greater value, and to afford a better market, either for the immediate produce of our own industry, or for whatever is purchased with that produce. ***As a rich man is likely to be a better customer to the industrious people in his neighbourhood than a poor, so is likewise a rich nation."***

Taxes and Growth

A rapid review of taxes and growth using the fiscal space dataset was conducted and some evidence for a negative relationship between taxes and growth appears in selected countries. US and China are both low taxing high-growth, while there are other countries that are high taxing-low growth (see Figure 42). It should be noted that only a relationship is detected rather than a cause.

The review looked at taxes and growth as a percent of GDP in various dimensions: i) Selected Countries and Tax Regime; ii) G20 and Tax Regime; iii) All countries and Tax Regime; iv) UK versus US; v) Region and Income Group; vi) Dominant Religious Group and

[6] Adam Smith's, Wealth of Nations, Part II On the Unreasonableness of those extraordinary restraints upon principles, p380: Beggar They Neighbor critique of mercantilism

Corruption Perceptions (CPI); vii) Natural Resource Dependency and Diversity (Fractionalization); viii) Legal Tradition and State Fragility; ix) BTI Democracy Status and Difficulty; and x) Political Finance Regulations (RoPFI) and Gov System.

For G20 countries a negative relationship between Taxes and Growth appears in G20 group data (see Figure 43). It also appears in the all countries scenario (see Figure 44), but not as strong as the selected country scenario.

A strong relationship is found when Comparing EU27/28 countries and the US, where the US as a low taxing nation has grown much faster than the EU27/28 when looking at variables in constant and current terms as well as a percent of GDP (see Figure 45).

Mixed findings are found when looking at regions and income groups. Negative taxes and growth relationship is not clear in when looking at the region dimensions. A positive relationship between taxes and income group as percent of GDP was detected (see Figure 46).

Mixed findings are found when looking at religion and Transparency International's CPI (see Figure 47). A negative taxes and growth relationship is not clear in religions or CPI. A strong relationship between taxes and religions was detected as was a positive relationship between taxes and income and CPI quintiles (i.e. more corrupt perceptions is linked to lower tax take).

Mixed findings are also found when looking at **natural resource dependency and diversity**. A negative taxes and growth relationship was not clear in resource dependency or diversity dimensions. A strong relationship between taxes and resource dependency was found as was a moderate relationship between taxes and diversity.

Mixed findings were found when looking at legal tradition and fragility (see Figure 49). Negative taxes and growth relationship is not clear in resource dependency or diversity. A strong relationship detected between taxes and legal tradition (i.e. Scandinavian and others). A strong relationship between taxes and fragility (higher fragility reduces tax takes) was also found.

A negative taxes and growth relationship is not clear in BTI democracy status or difficulty, but a relationship was detected in taxes and BTI democracy status and difficulty (see Figure 50). In other words, this implies that more democratic countries are more likely to have higher tax takes, and more difficult the country the lower the tax take.

A negative taxes and growth relationship is not clear in political regulation or system of government (see Figure 51). Some relationship between taxes and system of government was detected (i.e. parliamentary systems generally highest tax takes).

Annex H: Summary of US Sectoral and Functional Findings

Sectors of the US Government

Corruption and other efficiency losses for the different sectors of the general government sector are estimated by the model. For the period 2020-22, state government is estimated to be the single largest sector for losses at $592b (2.45% of GDP), with the central government (excluding social security funds) close behind at $571b (2.52% of GDP). Efficiency losses estimated for the social security funds are estimated at $320b (1.38% of GDP). (See Table 9 on page 124.)

Functions of the US Government

Corruption and other efficiency losses for the different function of government are also estimated by the model. For the period 2020-22 at the general government sector, the four largest functions for losses are: i) social protection at $349b (1.50% of GDP); ii) Health at $346b (1.47%); iii) General Public Services at $190b (0.81%); and iv) Education at $189b (0.80%). (See Table 10 and Table 11 on page 124.) For state government sector, the four largest functions for losses are: i) education at $186b (0.79% of GDP); ii) Health at $173b (0.73%); iii) Economic Affairs at $97b (0.41%); and iv) General Public Services at $87b (0.37%). (See Table 12 and Table 13 on page 125.)

Functional Analysis Summary

Six key functions of government and one sub-function were reviewed from an efficiency perspective to detect any poor performance that may indicate the presence of corruption, expensive political manoeuvres, and/or poor policy and implementation capabilities. The bringing together financial and non-financial performance is central to this process (Laing, 2019). The six functions are: i) social protection; ii) Defense; iii) Public Order and Safety; iv) Education; v) Health; and vi) Agriculture (sub-function).

Rapid reviews using the fiscal space model were conducted on social protection, defence, public order and safety, education, health and agriculture (see Functions and Outcomes (Efficiency and Value for Money) on page 76). Key findings are as follows:

Social Protection

- **Social protection funding is big at $2t p.a.**, representing around a quarter of the US GG budget, or between 8-12% of GDP or 20% of the budget. In 2023, the $2t cost was the same as the overall budget deficit. Most (88%) of the funding comes from the federal government

with 12% provided by the states. Democrat presidencies increase social protection, while Republican presidencies keep social protection levels stable. The US is in the middle of the G20+5 pack in terms of percent of GDP and expenditure, and in per capita terms for social protection and social contributions (revenues).

- **When looking at social benefits[7] the US is very high (ranked 6th)**, which was $4t in 2023, representing 44% of the budget.

- **Social protection outcomes are mixed – it is very unequal but also very rich, very diverse and has the one of the lowest levels of vulnerable employment in the world**. It has one the highest poverty rates in the OECD (20%) and has increasing first generation migrant stocks (15% at 2015) and high levels of acceptance of confirmed refugees, with labour shifting out of agriculture and industry and into services. China in comparison has a very low migrant stock of less 0.07%, low acceptance rates of refugees, and has relatively high employment in industry and agriculture. At the same time the US has low labour force participation and high female participation compared to other G20+ countries and has one of the lowest vulnerable employment indicators in the world.

Data provided at the Social Security section at page 149.

Defense

- **Defense spending is big at $0.8t p.a.**, representing 3-4% of GDP and almost 10% of the budget. Its size was declining since 2010. The defense function is exclusive to the federal government. US dominance is under threat from China, whose growth in defense spending started in 2008. In terms of combination hard and soft projection of power, the US relies more on hard power compared to China, which has a much higher proportion of aid in power projection estimates. The issue of the use of corruption as statecraft by the US versus China as part of foreign policy, diplomacy and power projection requires further research.

- **Defense outcome indicators require further research** as data is not available on the WDI.

Data provided at the Defence section at page 167.

[7] e.g. household transfers and can include health and education functional expenditures.

Public Order and Safety (police, prisons, fire and courts)

- **Public Order and Safety is currently around $0.5t or less than 2% of GDP, or 5% of the GG Budget**. In the US it is primarily as state function as CG spending accounts for 18% of GG funding. Funding has declined significantly over time in real terms driven by state policies. It is also a relatively big spender when compared to the G20+5 group in all four comparator metrics. US and Australia are the two biggest state-run systems for public order and safety (of the countries that provide state level data to the IMF).

- **Public Order and Safety outcome indicators require further research** as data is not available on the WDI.

Data provided at the Public Order and Safety section at page 170.

Education

- **Education spending is big at $1.4t p.a., representing around 5.5% of GDP and almost 15% of the budget.** Its size has been declining rapidly from 20% of expenditures in 2000 and over 7% of GDP in 2008. The education function is almost exclusive to state governments with the federal government's share being around 5% of total education function spending. Federal education spending rose almost 500% between 2000-22 from $40 b to $178b. US and China are the outliers in the G20+5 group with big spending by Australia, Ireland, NZ, Canada, UK, Germany in per capita terms. South Africa and Australis spend more as a percent of GDP, while Singapore is a big spending outlier in terms of share of the budget.

- **Education outcome indicators are mixed but overall but are still strong**: Participation is relatively high but is declining. There has been a rapid deterioration in reading proficiency at end of primary schooling. Primary school completion rates are declining also. All teachers are trained, and the US has one of the lowest pupil teacher ratios in world. When adjusting for size using funding as a percent of GDP, the US has one of the most efficient systems in the world in terms of cost per teacher and cost per student.

Data provided at the Education section at page 175.

Health

- **Health spending is big at almost $3t or over 10% of GDP** and over 25% of the budget. Health is a shared function between the federal and state governments with the central

government accounting for 50%. Shared functions are not necessarily good for accountability, allowing state and federal governments to blame each other for poor performance. Historically, the US spends the most on health compared to all other countries in the G20+5 group in all four metrics. These are high level indicators for the presence of corruption, expensive political manoeuvres, and/or poor policy coordination and implementation capabilities.

- **Health indicators are mixed but on balance poor.** While funding is massive compared to the rest of the world, major health indicators have deteriorated. Maternal Mortality risk and health funding are positively associated. This means the US are paying more each year and getting worse outcomes. Universal Health Coverage (UHC) rates in the US are the most expensive in both per capita and percent of GDP terms. The US has one the lowest life expectancy in the G20+5 group. Life expectancy unit costs on percent of GDP are most expensive for the US. The US has one of the lowest beds per capita rates in the group and has been consistently declining. Cost per capita for number of beds and life expectancy are highest and accelerating faster than all other countries in the group. All these metrics are strong indicators for the presence of corruption, expensive political manoeuvres, and/or poor policy and implementation capabilities.

Data provided at the Health section at page 185.

Agriculture

- **Agriculture fiscal data, which is within the Economic Affairs function was not on the IMF GFS database for the US** (along with all subfunction areas) so trend analyses was conducted for the G20 group of countries.

- **Excluding US for lack of data, China is by far the biggest spender on agriculture** (fisheries and forestry) in nominal terms ($350b) and as a percent of GDP (2%). Japan and Turkey are the next biggest as a percent of GDP (c1%). Japan is the biggest in terms of share of expenditure at just of 2% (note China is missing total expenditure under the 2M Expenditure item in the GFS database). Canada and South Africa are next largest at around 1.2% of expenditures. In per capita terms the rank is Japan, Canada, China and Australia ranging from a peak of $462 pp for Japan in 2012 to around $125pp for Australia in 2015.

- **Key results from analysis of agriculture non-financial performance benchmarks are:**

- **US has the 7th largest level of arable land** as a percent of land area of the G20, but levels fallen 15% since 1997. India is an outlier at 52%, though it has also seen a slower decline of 5% since 1997. France and Germany are the next largest at around 33%.
- **US is has the highest yield for cereal production** of G20 countries at around 8,000 kg/h above UK, Germany, France, Korea and Japan
- **China is by far the largest cereal producer at over 0.63b MT, followed by US at 0.40b MT** and India at 0.35b MT.
- **The US is the 5th largest capture fisheries producer** at around 4.8b MT. China is by far the largest with a peak of 16.6b MT, though a steady decline since 2016 and is now at 13b MT. Indonesia is the second largest followed by India and Russia
- **The US is not a significant producer of aquaculture** (farming of aquatic organisms). China is an outlier producer at 75m MT compared to the 2nd largest, Indonesia, at 15m MT.
- **US has had steady increase in food production over time, but Saudi Arabia is the outlier in terms of growth** rapidly increasing since 2016. India, Turkey and Russia are the next fastest growing food producers.
- **US has had steady increase in crop production over time, but Saudi Arabia is the outlier in terms of growth** rapidly increasing since 2016. Australia is the second fastest growing crop producer.
- **US is a moderate to low user of fertilizer** at around 130 kg/h of arable land. China is the largest at over 400 kg/h, followed by Brazil at 390kg/h and Korea at 325 kg/h.

Data provided at the Agriculture section at page 192.

Key Inputs – Salaries, Subsides, Interest and Non-Financial Assets

Key findings on inputs were as follows:

- **Salary costs are big at over $2t,** but have been declining fast as a percent of GDP and as share of the budget. 73% of the wage bill is paid at the state level. Comparing US with the G20+5 group the US has GG salaries being by far the biggest nominally, and one of the biggest in per capita terms, as percent of GDP (c6%), and as a percent of total expenditures. High salaries are prima facie indicators of person-based patronage systems.

- **Subsidies by the US have been very low historically and in comparison with the G20+5 group.** Levels increased above 5% of GDP during COVID. Korea Russia and Indonesia are heavy subsidisers. Low subsidies is an indicator of lower risk of industry-based patronage and corruption, including political payback obligations.

- **Interest payments rapidly increasing since COVID in all four comparator metrics and are now at $1tr**. For perspective, the deficit in 2023 was $2t, meaning all interest payments were paid for by borrowing. The US is in the top three for the largest interest payments using the different comparator metrics. Heavy interest payments indicate high risk of historical corruption, expensive political manoeuvres and/or ineffective fiscal policy.

- **Non-Financial Assets investment has declined fast since 2009** halving in nominal terms for $0.2t to $.01t (10% of interest payments). It picked up in 2016 but then fell away dramatically in 2022 at the end of COVID. 90% of spending on Non-Financial Assets is done at the state level. Further research is required on GG grant financing of non-financial assets. Low infrastructure costs also indicate relatively low risk of infrastructure related patronage and corruption schemes and/or expensive political manoeuvring. It should be noted that while the risks are in low in this area, these systems and networks of inefficiency could be diverted elsewhere to operational areas. These can be even more cost-ineffective, in that infrastructure related corruption at least builds something albeit at inflated costs, while operational type patronage or corruption schemes (e.g. consulting, service and non-government organisation financing) can deliver little of actual value for the money spent.

Key Aggregates – Revenues, Expenditures and Borrowing

Key finding on the main aggregates are:

On Aggregate Revenue and Expenditures, the US is by far the biggest in nominal and per capita terms. France, Italy and Germany are much higher as a percent of GDP. This reflects the higher priorities in the EU for social benefits and social protection, and possibly lower priorities for growth as revealed in the tax and growth section of this paper.

- **US has a long history of high deficit spending** (combined with declining investment in non-financial assets) all associated with the three fiscal shocks over the last 2 decades (9/11, GFC and COVID). $2t deficit in 2008 crisis compared to over $3t deficit in 2020 representing around 5-15% of GDP p.a. and 10-33% of the budget over the period. Aggregate state government deficits have been generally low and were in surplus during COVID.

- **Comparing the US to the other G20+5 group of countries has the US generally being the biggest borrower over the last two decades in all four comparator metrics** used in this paper. Analysis of gross saving metrics, which is an indicator of borrowing for current expenditures reveals significant issues for the federal government (not states) in this area also.

Annex I: G20 Efficiency Benchmarks and Other Comparators

This annexe looks at trends in efficiency, focusing on financial and non-financial performance indicators. It is separated into three sub-sections: i) Main aggregates; ii) Key functions where funding by purpose of spending is compared to outcomes; and iii) Key inputs (e.g. salaries, subsidies and capital).

Main Aggregates

Three main aggregates are covered here: Sectorization and Classification of Functions of Government (CoFOG) Coherence; ii) Aggregate Revenues and Expenditures; and iii) Functions and Outcomes (Value for Money).

Sectorization and COFOG Coherence

The review of completeness of sector reporting and coherence of expenditure reporting by CoFOG[8] and economic classifications on the IMF GFS database discovered some issues that require further investigation.

On completeness, the main issues of recent times is the loss of US local government data from 2000 onwards. Historical issues are limited to lack of data for certain sectors for certain time periods. The only sector with complete trend data from 1972 is central government including social security funds. All others have some gaps, with some longer than others (see Table 17 on p 145). Further research is required to review the consolidation and elimination methods used for different sectors (e.g. elimination of grants to and received by general government sector).

On coherence of expenditure reporting by CoFOG and economic classifications for the different sectors, performance is very good for the central government from 2001, with almost perfect coherence achieved (meaning total expenditure under economic classifications and COFOG are the same). General government and state governments have some not so immaterial differentials indicating that the source of the differential is state governments, rather than the federal government (see Table 18). There could be reasons for this related to accounting treatment differentials between COFOG and economic expenditure reporting.

[8] Ten Government Functions under COFOG are: i) General public services; ii) Defense; iii) Public order and safety; iv) Economic affairs; v) Environmental protection; vi) Housing and community amenities; vii) Health; viii) Recreation, culture and religion; ix) Education; and x) Social protection

Accounting treatments between the two reporting forms should ideally be the same or reported separately. Further research is required.

Aggregate Revenues Expenditures

In terms of aggregate revenues, the US is by far biggest in nominal terms at $8.3t in 2023 out of the G20+5 group. The US is also the biggest in in per capita terms closely followed by Germany and Canada. France, Italy and Germany are the biggest revenue collecting countries as percent of GDP at c50% (see Figure 79).

US aggregate expenditures were also by far the biggest in nominal terms at $10.3t in 2023. The US is also the biggest in in per capita terms closely followed by Germany and Canada. France, Italy and Germany are the biggest spending countries as percent of GDP at around 50% to 60% (see Figure 79).

Functions and Outcomes (Efficiency and Value for Money)

This section examines efficiency and value for money by comparing financial performance with non-financial performance – specifically, comparing government spending on various functions with the outcomes of that spending on functions. The inquiry is whether the government is achieving a satisfactory return on its investments in different areas. For instance, it evaluates if the expenditure on health or education is yielding good health and education outcomes, and whether these outcomes are improving over time.

Six key policy areas of government are reviewed alongside G20 country benchmarks: i) social security; ii) defense; iii) public order and safety; iv) education; v) health; and vi) agriculture.

Social Security is reviewed from both a functional and economic perspective. Social protection spending using COFOG data is reviewed first and compared with non-financial outcomes data on the World Development Indicators (WDI) database. This is then followed by a review related spending under economic classification being the revenues from social contributions and expenditures made on social benefits, and the net spending on social benefits.

Defense is reviewed from two perspectives using COFOG and also more general funding the area of projection of hard and soft power, being the combination of funding for aid and defense.

Public order, education and health are then reviewed against COFOG financial data and WDI non-financial outcomes data.

Social Security

This section covers social security funding. The term is used to cover two different types of spending on welfare. From a public finance perspective, the purpose of spending under COFOG is covered by Social Protection, while under the economic classification it is covered social benefits.

"Expenditure on social protection includes expenditure on services and transfers provided to individual persons and households and expenditure on services provided on a collective basis" (IMF, 2017, p. 175). It covers welfare areas such as sickness, disability, old age, survivors of deceased persons, family and children, and unemployment.

Social benefits are "current transfers receivable by households intended to provide for the needs that arise from social risks, for example, sickness, unemployment, retirement, housing, education, or family circumstances" (IMF, 2017, p. 134). Social benefits can be a lot higher than social protection, for example, when medical benefits are classified as social benefits, which would be covered under the health function.

Social Security - COFOG

US Social Protection spending is dominated at the federal (CG) level, with state level spending representing around 12% of total general government spending.

Social protection spending was around 7% of GDP from 2000-07, then increased to around 8% from 2008-19, then COVID pushes it up to 12%, almost doubling from $1.6b to $2.8b, with a correction back to 8% of GDP ($2b). (See Figure 81).

There is some indication of state level responses to federal policy. Social protection at the state level was 1.1% of GDP from 2000-10 (high state spending when federal low) then fell c20% lower to 0.9% between 2010-2019, indicating lower state spending when federal spending is higher (see Figure 82).

A review of social protection funding under Democrat and Republican presidents was undertaken. It found that under democrat presidencies social protection funding increases, under republican presidencies it is stable (see Figure 83).

In terms of comparator/benchmarking countries (G20+5), the US has by far the largest nominal expenditure on social protection. As a percent of GDP, the US is 8% in line with China's level. The level of spending also represents 20% of total general government expenditures, which is around the lower middle of the pack, with South Africa, Singapore and Indonesia below[9]. (See Figure 84.)

Social Security - Economic

US social contributions (social security tax/levies or pension related revenues from premium like charges) saw a dip during the Global Financial Crisis. 2011-12. Revenues represent around 22% of total general government revenues and has moved around +/- 2% over the last two decades. US social contributions is growing in line with population growth. (See Figure 85.)

Comparing G20+5 countries China, Russia, UK and US have around the same level of social contributions are collected at 6.5% of GDP or around 20% of revenues. There are 10 countries below US levels as percent of GDP: Canada, Ireland, Saudi Arabia, Mexico, Philippines, NZ, Indonesia South Africa, Singapore, and Argentina. Germany and France have the highest levels at 17% of GDP or over 30% of revenues, whereas the US has around 22% of total revenues. The US is the 3rd highest in per capita terms[9], behind Germany and France. (See Figure 86)

US spending on social benefits relatively low between 2001-08 at c11% of GDP or 33% of total expenditures, then levels rose to 14.5% of GDP or 40% of total expenditures. COVID pushed up to levels up to a peak of 18% of GDP or 44% of total expenditures. (See Figure 87.) At the state level, social benefits have been increasing steadily through cycles from 2.8% of GDP in 2001 to 3.9% in 2022 (see Figure 88).

Comparing the G20+5 group of countries, the US is a big social benefit spender. It is the 4th highest in 2022 as percent of total expenditure (42%), the 2nd highest in per capita terms and the 6th highest in 2022 as percent of GDP (c15%). The five biggest spenders on social benefits as percent of GDP are France (26%), Germany (25%), Italy (23%), Japan (22%) and Brazil (18%). (See Figure 89.)

[9] Australia has a mandatory private superannuation/pension scheme which may not be classified as a social security fund. Further research is required.

For net social benefits (social contributions minus social benefits) the US spent $2.4t in 2022, equivalent to 8.6% of GDP. In 2023 the overall deficit was 88% of net social benefit spending or gross saving/borrowing (borrowing for current expenditures) was 50% of net social benefit spending. While money is fungible, this statistic indicates that the US net social benefit system is half financed by borrowing, which is a transfer from future generations to look after the current generation.

The US is the third highest net social benefit spender as percent of expenditures with 24% in 2022. Highest is New Zealan (33%) and Australia (30%). The US is the 2nd highest in per capita terms ($7k pp) after Australia (see Figure 90).

Social Security – Non-Financial Performance

None of 27 Social Protection Performance metrics on WDI are available for the US. Four other SP metric categories (Unemployment, Migration, Labor Force and Economic Activity) are available (see Figure 91). Additional research is required on social protection outcomes.

The US has one of the highest societal poverty rates in the OECD at just under 20% of the population (only Mexico and Turkey have higher rates). Note societal poverty line is a measure of poverty and inequality that introduces medium-level consumption within a county into poverty line calculations. The US also has one of the highest for Poverty GAP at $6.25 per day. (See Figure 92).

Labor force participation in the US for ages 15-24 fell rapidly up to 2010 reaching 55% down from over 65% in late 90's. Female participation in the workforce is almost at parity going from less than 80% in late 90's. (See Figure 93.)

US unemployment follows global shocks with peaks in 2008 financial crisis and COVID. (See Figure 94.)

Migrant stocks are increasing from 12.3% of the population to 15% between 2000 and 2015, but WDI data stops at 2015. (See Figure 94.) China in comparison has a very low migrant stock of less 0.07%, representing 214% difference and there appears to be almost zero demand from economic migrants, asylum seekers and refugees to make their home there.

Acceptance of confirmed refugees before becoming US citizens have been increasing in after a steady decline from the late 90's. US acceptance reached 409k people in 2023 up from 262k in 2012. The 2023 result puts the US as the 6th highest country to take in confirmed

refugees and 8th on a per capita basis (1.2 for every 1,000 citizens). The peak level for the US was 840k in 2006. (See Figure 95.)

Of the G20+5 group, Turkey, Germany and Ireland are outliers for confirmed refugee acceptance with Turkey being the biggest outlier in numbers (3.8m in 2021) and per capita terms (4 for every 100 citizens). Next biggest receivers of confirmed refugees on a per capita basis are Germany and Ireland as outliers, followed by France, Russia, Pakistan, UK, Italy then Canada. (See Figure 95.)

In the EU28 in 2023, there were four countries that had the per capita acceptance rates above 3 per 100 citizens. These were Czech Republic (3.5), Cyprus, Estonia and Germany (3.1). In that year, Ireland was 2.16 and UK 0.66. Romania was the EU country with lowest acceptance rate of 0.46.

In terms of unemployment by sector, the US has seen a significant decline in employment in agriculture and industry (as percent of total) up to 2008. These were offset by a significant increase in employment in services. Comparing with the G20+5 group, the US is one of the lowest employers in agriculture and industry, but one of the highest in services, which have national security implications. (See Figure 96.)

The US has experienced a significant decline in vulnerable employment (inadequate earnings and low worker rights) **and is now the 2nd lowest in the world** (with an increase during COVID). Ther have been big shifts to part-time employment during the GFC and COVID. GDP per person employed has been growing consistently. The US is the third highest GDP per person employed (below Singapore and Ireland). (See Figure 96.)

The US is the 2nd most unequal country of high-income countries, the 6th most unequal in the OECD, but is also the richest with the lowest level of vulnerable employment. For perspective, Gini coefficient metrics, which is the standard measure for income inequality, have Germany, Austria, Pakistan, Iraq and Egypt being the five countries that have achieved the lowest rating over the period. Gini results can reveal if countries are equally poor or unequally rich. (See Figure 97.)

Four of these five countries with high levels of equality have relatively low diversity/fractionalization metrics: Pakistan 0.60, Iraq 0.41, Germany 0.33, Austria 0.22 and Egypt 0.14. For perspective, the top twenty countries for being the most diverse in the world in terms of race, religion and language are all from Africa, with Bermuda being the first non-

African country to have a high diversity metric, followed by Canada (0.66) as the second high income country followed by the US (0.63). (Greenberg, 1956; Loh and Harmon, 2010)

Defense

The US experienced a decline in nominal defense spending in mid-2010's but picked up in 2018. There were sustained declines in US spending on defense in terms of percentage of GDP and as a percentage of expenditures. A dip occurs in 2020-23. (See Figure 99.)

China has had big and sustained increase in defense spending from 2010 and is now an outlier like the US compared to other countries. Singapore was by far the biggest defense spender in terms of percent of GDP between 2000 and 2005 at around 5%. Singapore is also an outlier of spending on defense as percent of expenditures with two peaks of above 40%. Australia, UK and then France are the next biggest spenders in per capita, percent of GDP and percent of expenditures. (See Figure 99.)

Projection of Power – Defense and Aid

US is by far the biggest spender (c$0.8tr in 2022) on projection of hard (defense) and soft power (aid) at around 3.5% of GDP (in 2010 it was almost 5%). It should be noted that this metric is limited as there are other sources of soft power, such as diplomatic, trade and currency. (See Figure 100 and Figure 99.)

China is increasing hard and soft power quickly coming close to $0.3tr pa in the 2020's from negligible amounts in 2008 and prior. While there are data difficulties associated with China aid, from the data that is publicly available it appears that China has a much higher use of soft power (aid) at around 33% compared to the US at around 13% in 2023. (See Figure 100 and Figure 99.)

Defence – Non-Financial Performance

Data on the on defense is not include on the WDI database. Further research is required to secure defence outcomes, outputs and inputs data.

Public order and safety

The US experienced sustained decline in funding for public order and safety (police, prisons, fire and courts) in terms of percent of GDP and percent of total expenditures. Declines occurred via triple peaks as a percent of GDP. Inflation and growth impacts are evident. (See Figure 102.)

Public order and safety is primarily a state funded function as the US central government accounts for around 18% of all spending (See Figure 102 and Figure 103.)

Comparing the US with G20+5 group of countries, the US is the biggest spender in nominal and per capita terms. China has seen a sustained growth since 2008 and is now an outlier like the US. The US is the third biggest as a percent of GDP (c2-2.5%) and total expenditures (c5%). (See Figure 104.)

US is also the biggest funder at state government level, though there are low level of disclosures at the state government level. Other countries where state governments play a major public order role are Australia, Germany, India, and Argentina. (See Figure 105.)

Education

The US has sustained declines in spending on education over the last two decades in terms of percent of expenditure, and the last decade in terms of percent of GDP. However, education is primarily a state funded function and central government accounts for only 5% of spending in 2022. Federal Government funded education rose by 445% between 2000 and 2022 from $40b to $178b, with big increases in 2010 and 2021, followed by minimal correction (see Figure 107 and Figure 108).

US and China are outliers in nominal terms with China having sustained growth from 2008. US is the biggest spender in per capita terms, followed by Australia, Ireland, NZ, Canada, UK and Germany. As percent of GDP South Africa and Australia spend more than the US in recent years. Singapore is an outlier on spending as percent of expenditure from 2000-18. (See Figure 109).

Education – Non-Financial Performance

Non-financial performance metrics for education reviewed here are: participation, outcomes, inputs and efficiency, and some average cost-effectiveness ratios (e.g. cost per primary school teacher and cost per primary teacher student).

On participation, the US has seen recent rapid declines in enrolments, in tertiary from 2021-22 (COVID) and number of secondary pupils from 2022. Primary schools' enrolment fell from 2018, with a dramatic decline in 2021. Historically US has one of the highest participation rates though India and China have much higher numbers due to size differences. (See Figure 110).

On learning outcomes, the US has seen a rapid deterioration in reading proficiency at the end of primary school, but current levels are still high. Only, Ireland, Italy and UK have better reading outcomes. Historically, US has the highest doctorate attainment rate, though India and Russia now have higher rates (missing data for China). There was a rapid decline in primary school completion rate in 2022 (COVID). (See Figure 111.)

Reviewing inputs and efficiency, US has relatively high rate of overage students in primary schools and there has been a decline in pupil teacher ratios (reflecting a quality-efficiency trade off). The US Still has one of the lowest rates in the world at under 15. The US have 100% of teachers trained in all forms of school. (See Figure 112.)

In terms of cost-effectiveness and when adjusting for size (GDP), the US has one of the lowest spend per primary pupil and teacher (i.e. implies a very efficient state sector run education system). It is the biggest education spender in the G20 (see Figure 113). Similar findings for the secondary education system (see Figure 114). When adjusting for size using per capita figures US is also one of the lowest for spend per primary and secondary pupil and teacher indicating significant efficiency within the state-run sector (see Figure 115).

Health

The US has experienced sustained increase in US health spending in all four metrics. Health spending during COVID fell as percent of total expenditure. The health function is a shared function between the central and state governments, where the federal government accounts for 50% of spending in 2022. (See Figure 117.)

Similarly, there was a sustained increase in US health spending at the state level in all four metrics. Health spending at state level during COVID was steady as percent of total GDP, but rose as a percent of total expenditures. (See Figure 118.)

Historically, the US spends the most on health compared to all other countries in all four metrics. In 2022 the GG levels were: $2.7 trillion, 10% of GDP, 20% of total expenditures and $8k per person. The second highest are Japan at 9% of GDP and Ireland at $5k per person. UK, France and Germany are also high as percent of GDP at around 8% to 9%. The lowest in the group is Indonesia at 1.5% of GDP. (See Figure 119.)

Health – Non-Financial Performance

Maternal mortality risk and health funding positively associated indicating a cost-ineffectiveness. Universal Health Coverage (UHC) rates in the US are the most expensive in both per capita and percent of GDP terms. (See Figure 120).

Cost per capita for number of beds and life expectancy are the highest and accelerating faster than all other countries in the G20+5 group .US has one of the lowest beds per capita rates in the group, which has been consistently declining. US also has one the lowest life expectancies in the group, recently falling below Saudi Arabia. Life expectancy unit costs on a percent of GDP basis is most expensive for US with UK second highest. Cost per beds on percent of GDP basis is closer with UK, US, Canada, NZ Italy the most expensive. (See Figure 121.)

Granular COFOG data for US is not available on the IMF GFS database for Medical Products, Appliances and Equipment (incl. pharmaceuticals). Only the top tier COFOG data is provided for the US. This means more granular cost-effectiveness analysis for US in this area cannot be done using GFS-COFOG database. Japan, Germany then France are the biggest spenders in the G20+5 group in nominal terms. Japan is biggest spender in all four metrics. (See Figure 122).

Agriculture

The IMF GFS database does not have agriculture data for the US as only function data and no sub-function data is available. Of the G20 countries the only other country that does not have agricultural sub-function data[10] is Saudi Arabia. While general government fiscal data is not available for Argentina, Brazil and it is available at the Budgetary Central Government level.

Agriculture – Non-Financial Performance

- **Key results from analysis of agriculture non-financial performance benchmarks are:**
    - **US has the 7th largest level of arable land** as a percent of land area of the G20, but levels fallen 15% since 1997. India is an outlier at 52%, though it has

[10] Agriculture spend is categorized under economic affairs function

also seen a slower decline of 5% since 1997. France and Germany are the next largest at around 33%.

- **US is has the highest yield for cereal production** of G20 countries at around 8,000 kg/h above UK, Germany, France, Korea and Japan
- **China is by far the largest cereal producer at over 0.63b MT, followed by US at 0.40b MT** and India at 0.35b MT.
- **The US is the 5th largest capture fisheries producer** at around 4.8b MT. China is by far the largest with a peak of 16.6b MT, though a steady decline since 2016 and is now at 13b MT. Indonesia is the second largest followed by India and Russia
- **The US is not a significant producer of aquaculture** (farming of aquatic organisms). China is an outlier producer at 75m MT compared to the 2nd largest, Indonesia, at 15m MT.
- **US has had steady increase in food production over time, but Saudi Arabia is the outlier in terms of growth** rapidly increasing since 2016. India, Turkey and Russia are the next fastest growing food producers.
- **US has had steady increase in crop production over time, but Saudi Arabia is the outlier in terms of growth** rapidly increasing since 2016. Australia is the second fastest growing crop producer.
- **US is a moderate to low user of fertilizer** at around 130 kg/h of arable land. China is the largest at over 400 kg/h, followed by Brazil at 390kg/h and Korea at 325 kg/h.

Key Inputs (By Economic Classification)

This section on key inputs moves away from the why or purpose of spending, and on to what is being bought or collected (the economic classification). Six areas of interest are covered: i) Compensation for Employees; ii) Subsidies for Companies; iii) Interest Payments; iv) Acquisition of Non-Financial Assets; v) Net Lending/Borrowing(also Net Lending / Borrowing) and vi) Gross Saving/Borrowing. GFS financial statements are provided at Figure 132.

Compensation for Employees

Employee compensation for the US the GG level has been steadily declining as percent of GDP and recently as percent of total expenditures (see Figure 133). The wage bill is mostly at the state level (73%), which has been declining quicker than the GG level as a percent of GDP and recently as percent of total expenditures (see Figure 135).

US GG spending on employee compensation is by far the biggest of the G20+5 group, nominally at US$2.2t, in per capita terms, ($4.8k pp), in the top 3 at as percent of GDP (c6%), and as a percent of total expenditures (36%) (see Figure 134). In terms of income group and regions results are as expected, other than Middle East and SSA, who pay the most as a percent of expenditure (similar to resource dependency results).

Subsidies for Companies

US subsidies to private sector enterprises have historically been relatively low accounting for 1% of expenditure, 0.4% of GDP and about $300 pp in 2023. COVID massively increased subsidies tenfold in all four comparator metrics (see Figure 136).

US subsidies to private sector enterprises at the state level are small relative to the federal government. State governments subsidized companies more during the 2008 financial crisis than during COVID, but only to the tune of $8b for all state governments. (See Figure 137.)

Comparing the US to other G20+5 group, Korea is now an outlier for subsidies in terms of percentage of GDP and total expenditures. Prior it was Russia and Indonesia. US subsidies increased the most during COVID. Canada, UK and Australia also had massive increases but are quickly returning to historical positions. (See Figure 138).

At the state level, Russia was the biggest provider of subsides in 3 of the four comparator metrics. The size of the US subsidies increase during COVID were the most of any G20 country. Canada and Australia both had massive increases and are not quickly returning to historical positions like the US. (See Figure 139).

Interest Payments

Interest payments rapidly increasing since COVID in all four comparator metrics and now at $1t, or 3.5% of GNI and almost 10% of expenditures, or $3k per person. At the State level it is the opposite, with declining interest payments in all four comparator metrics. However, most (c80%) interest is paid at the federal level. (See Figure 140 and Figure 141).

Comparing the US to the G20+5 group, the US is in the top 3 for interest payments in three of the four comparator metrics. Brazil is the highest as percent of GDP (8.5%) and as a percent of expenditure (18%) (see Figure 142).

From region perspective, high income country interest payments on average are declining as percent of GNI, but fairly stable as a percent of total expenditures. Historically, there is a pattern of divergence then convergence of interest payments as percent of expenditure for the different income groups as percent of GNI.

Acquisition of Non-Financial Assets

US experienced a fast decline in spending on Non-Financial Assets (e.g. infrastructure) since 2009, halving in nominal terms for $0.2t to $0.1t, which now represents around 10% of interest payments. Funding picked up again from 2016 but then fell away dramatically in 2022 at the end of COVID, with a shaped bounce back. (See Figure 144).

90% of spending on Non-Financial Assets is done at the state level and so the profile is the same as the GG level (see Figure 145). Further research is required on the link between GG grants to states for infrastructure.

Comparing infrastructure spending with the G20+5 group, the US is well below other countries in three of the four core comparator metrics – US only dominates in nominal terms.

Net Lending/Borrowing (NLB)

The fiscal indicator net lending and borrowing is calculated as revenue minus expenditure or revenue minus expense minus net investment in nonfinancial assets. It is equivalent to total financing or the aggregate transactions in assets and liabilities. It is also defined as the difference between net acquisition of financial assets and net incurrence of liabilities (IMF, 2017, p. 81).

US has a long history of high deficit spending, combined with declining investment in non-financial assets (see next section on gross saving/borrowing). Key deficits include the $2t deficit that occurred during 2008 GFS, a $3t deficit in 2020 for COVID, and another $2t in 2023 (further research required). There was a slow return from massive deficits during 2008 financial crisis, whereas there was a faster return after COVID. (See Figure 147).

State government deficits have been generally low at around $0.25t up to COVID, when the state sector went into surplus. (See Figure 148).

Comparing the US to the G20+5 group has US being the biggest borrower over the last two decades in all four comparator metrics. Korea, Russia and Germany are the only countries delivering any sustained surpluses over the two decades. (See Figure 149).

A review of general government NLB trends under Democrat versus Republican presidencies found that Democrat Presidencies increase deficits once in power but then reduce, while Republican Presidencies tend to reduce once in power But overall averages are about the same in terms of % of GDP (5%) and Revenues (15-16%). Democrats appear more volatile since they start with increases to deficits. (See Figure 150.)

Comparing GFS NLB and calculated NLB (Net Acquisition of Financial Assets minus Net Incurrence of Liabilities) found some coherence issues. Statistical discrepancies (errors) or coherence rates on Net Lending/Borrowing are small as percent of NLB value but can be significant in dollar terms (e.g. $0.5t error in 2023). US and Singapore major outliers in Net Acquisition of Financial Assets and Net Acquisition of Liabilities, though many more of the G20+5 group had high variability during GFC and COVID when comparting as a percent of GDP. (See Figure 151 to Figure 153.)

Gross Saving/Borrowing

Gross saving/borrowing measures savings if an overall balance plus the spending on non-financial assets is positive, otherwise it is a measure of borrowing for current expenditures and equivalent to the gross operating balance (IMF, 2017, p. 81). Borrowing for current expenditures would generally have to be debated heavily by the executive and parliamentary oversight committees as it increases the risks significantly that future generations will pay for the lifestyles and political manoeuvres of the current generations.

The US has a recent history of borrowing to finance current spending with very high levels between 2008-2012 (during and after the financial crisis), 2019-2021 (COVID) and 2023 (reason requires more research) (see Figure 154). The state government sector generally does not borrow to finance current expenditures and the sector saved a lot ($1t of 5% of GDP) during COVID (see Figure 155).

Comparing results with other G20+5 group has Ireland as an outlier in 2010 for borrowing to finance current expenditures at 37% of GDP, 113% of Revenues, and $18k

per person. Singapore is an outlier for saving the most. Big risks appear to be building up with the significant levels of borrowing for current expenditures over the last two decades. (See Figure 156.)

US borrowed $14t since 2001 and UK ($3t), making them the two biggest borrowers for current expenditures - most in nominal terms and as a percent of GDP (UK 4.4% and US 3.%). Over the period 2001-2023, Russia, Canada Korea and Germany save the most in US$ (c$2t) and as percent of GDP (c-2-6%). (See Figure 157)

Comparing income groups, high income countries are borrowing a lot for current expenditures in all four metrics. Low-income countries borrowing a lot as percent of revenue. (See Figure 158).

Comparing regions, North America is the biggest borrower for current expenditures in all four metrics (See Figure 159).

As expected, moderately and highly resource dependent countries save the most as percent of GDP, percent of revenue and in per capita terms (see Figure 160).

On religions, no dominant group saves the most while folk religions (Macau, Tawain and Vietnam) are an outlier for borrowing in recent times as percent of revenue. Excluding outliers (folk and non-dominant religions), Buddhists save the most in terms of percent of GDP and Revenue. (See Figure 161 and Figure 162.)

Fiscal Burden

Fiscal Burden is "an indicator of the compulsory contributions to the government" (IMF, 2017, pp. 79–81) and is tax plus social contribution revenues.

US Fiscal Burden metrics all show sustained increases with current peak of 88% of revenues and a peak of around 30% of GDP in 2022. US Fiscal Burden at the State level is same profile as Tax as the states do not collect social contributions (see Fiscal Space from Tax section on page 14).

Comparing the US with the G20+5 group has US as being one of the highest for Fiscal Burden for three of the four comparator metrics. The US is first and outlier in nominal terms (second is China), US is first in per capita terms and third behind UK and Germany as percent of revenue (88%). As a percentage of GDP, the US is in the middle of the pack. (See Figure 164.)

Annex J: How Corruption Works in Public Finance Systems

The foundation framework presents one of the three faces of public finance systems in way that demonstrates how public finance systems facilitate corruption. The following describes in simple language of the corruption face of public finance systems. It is presented as the simple corrupt objective at each point of the "follow-money corruption cycle" (See Laing, 2020, pp. 22–23):

1. At the start of the budget *people pay to get their budgets or their preferred policy,* including under an auction like arrangement, rather than having the budget allocate resources based on policy and evidence (Laing, 2017). Corrupt budgeting of this form has been described as "theatre that masks the real distribution and spending." (Rakner et al., 2004)

2. At the commitment phase corruption works by *people paying to get access to the allotment* or approval to spend the budget, rather than using the commitment system to manage cash and ensure appropriations (legal authorities) are not breached.

3. At the procurement stage *people pay to win contracts,* rather than using it to support competition to keep costs down and quality up.

4. At the contract management stage *people pay to change contracts* in a favourable way for themselves, rather than ensure contract terms are complied with.

5. At the verification and payment stage people pay to falsely verify that goods and services were delivered on time and to specification, and then pay again to get paid, rather than ensuring payments are made in accordance with contracts.

6. At the audit stage *people pay for audit irregularities to be cleared*, whether those irregularities are real or otherwise (i.e., made-up to get more bribes or to punish), rather than audit providing assurances that financial information is accurate and believable and auditing is a reliable mechanism to support institutional learning.

7. At the personnel and payroll stage *people pay for positions and then pay to retain positions* through family connections, outright bribes or cashing in old debts and favours, rather than promoting equal opportunities and merit-based recruitment and retention.

8. At the accounting stage *people pay to cover tracks and facilitate licit and illicit movement* through the accounting systems, rather than ensuring accounting, classification and reporting rules are followed.

9. At the revenue collection stage *people pay to facilitate favourable treatments of what they owe or what they are paying for* (including illegal goods or services) or speed up intentional or unintentional slow administrative processing, including in service delivery areas, rather than ensuring revenue is assessed and collected in accordance with the rules.

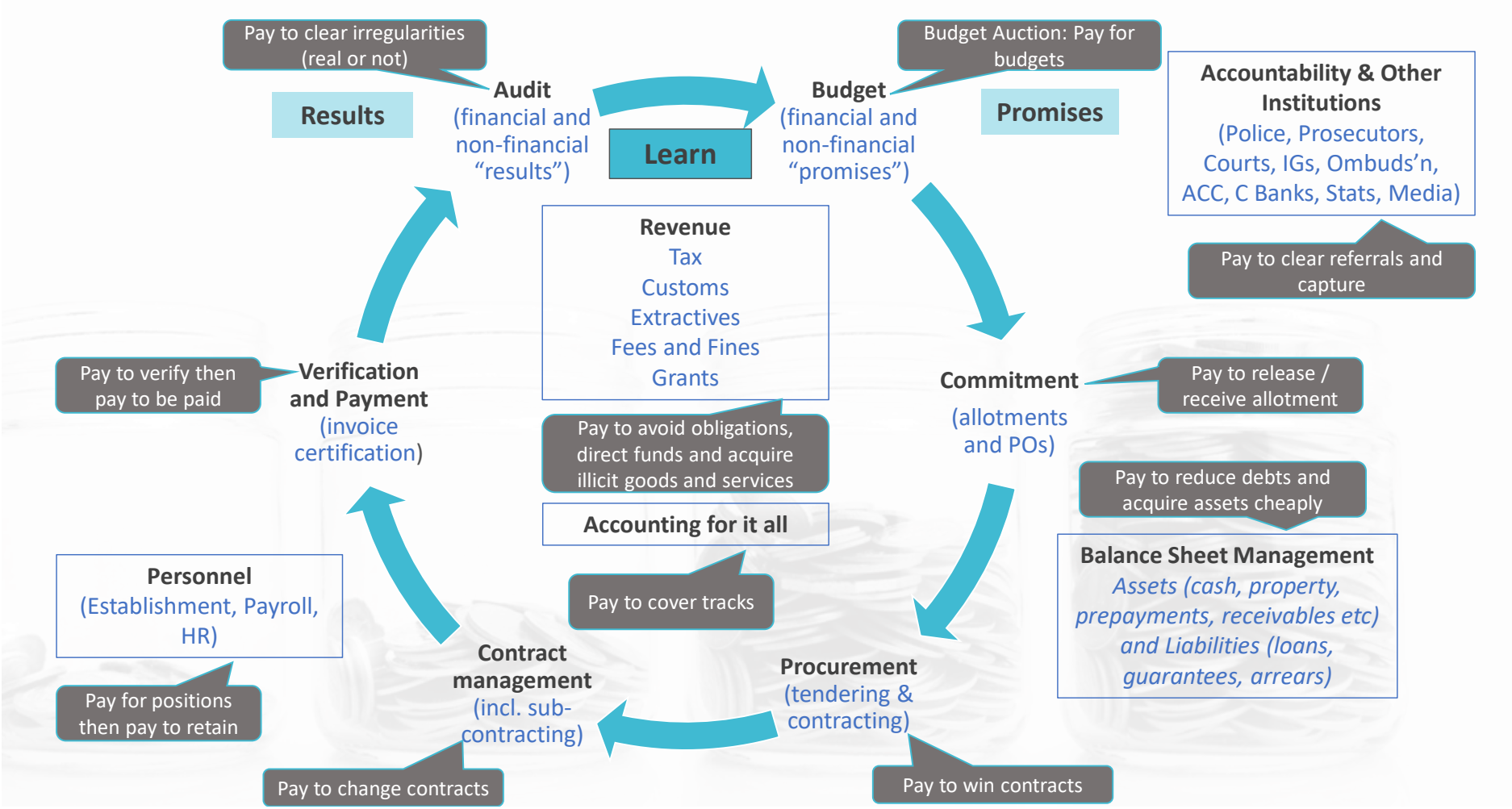
10. During balance sheet management phases *people pay to secure favourable treatments* of assets and liabilities, rather than ensuring assets and debts are managed well.

11. If then, at any point in the cycle evidence of malfeasance emerges and results in referrals to any or all the accountability institutions (like the police, anticorruption commission, prosecutors, inspector generals, and auditors), *people just pay again to clear the allegation, investigation, prosecution, finding or sentence*, rather than ensuring checks and balances are working as intended and the rule of law is respected.

Annex K: Tables and Figures

Follow-The-Money Corruption Cycle

Figure 1. Follow-the-Money Corruption Cycle



Source: Laing (2020), Development Practice Note, Institute for State Effectiveness; adapted by the author.

Figure 2. Systematic Literature Review Tool on Corruption in the USA

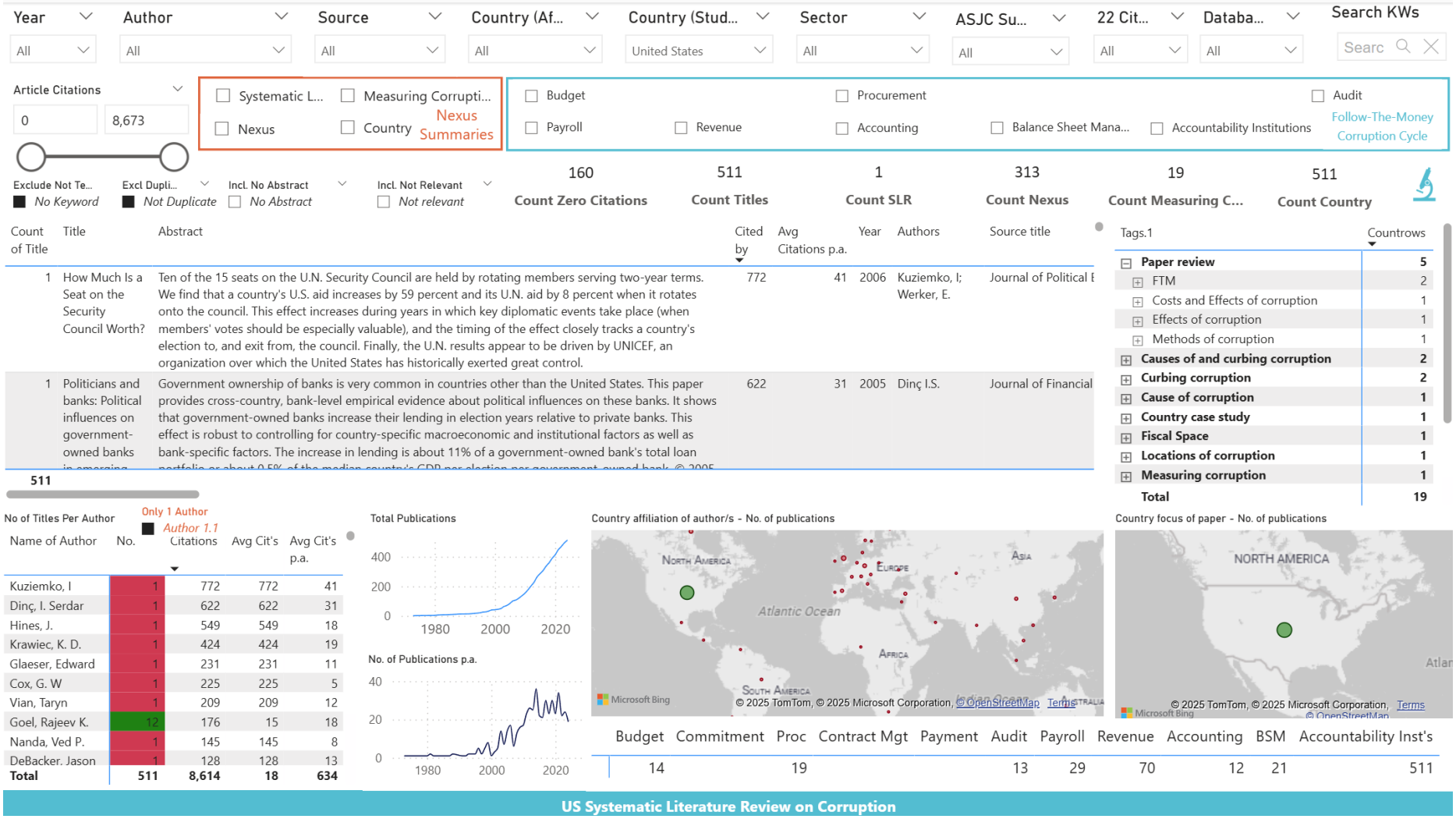


Figure 3. Systematic Literature Review Tool on the Definition of Corruption (Broad Criteria)

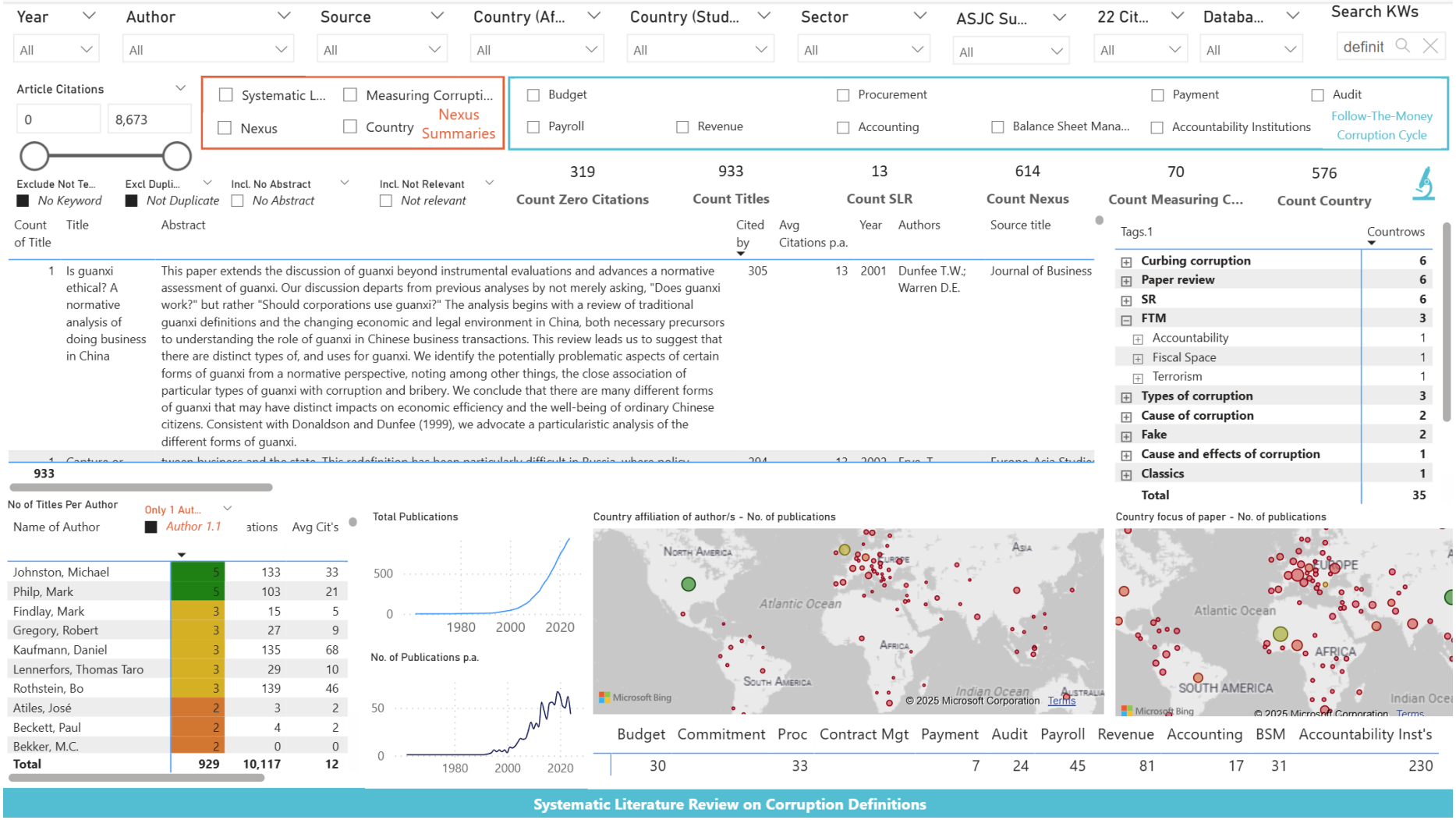


Figure 4. Systematic Literature Review Tool on the Definition of Corruption (Title Only Criteria)

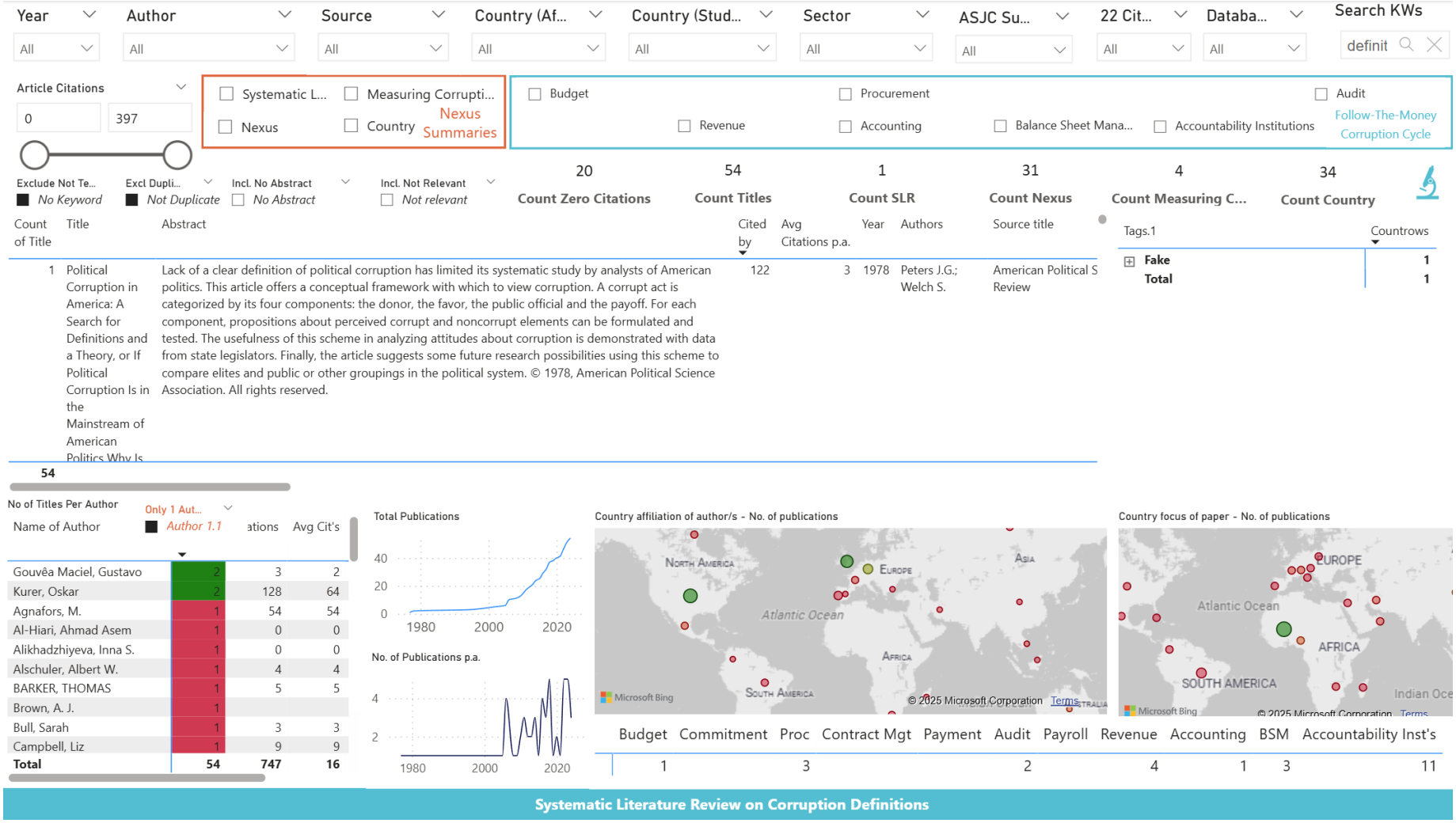
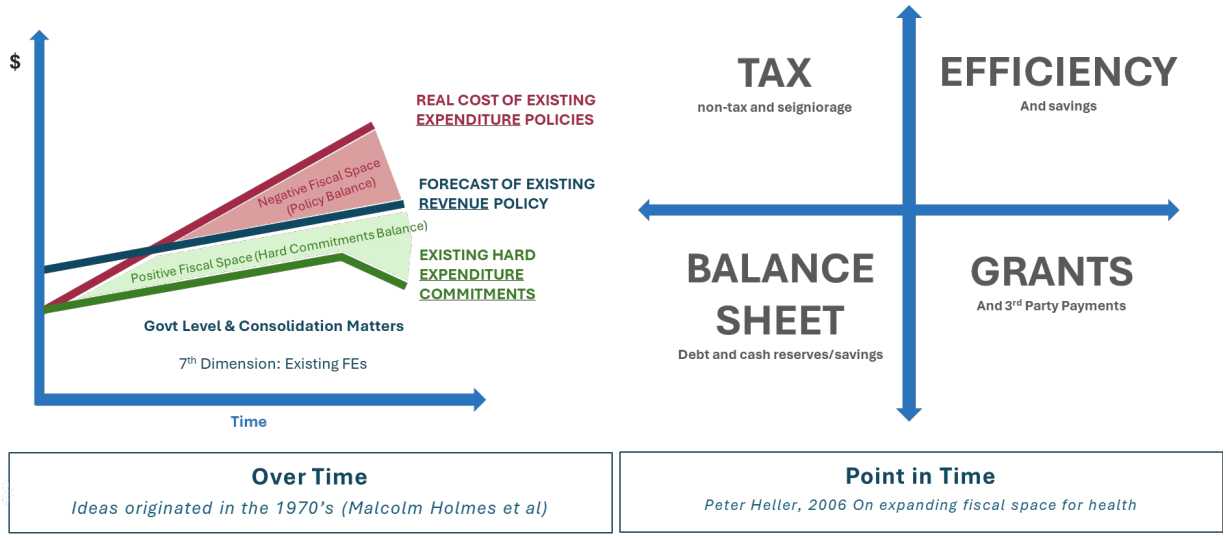


Table 4. Results for Definition of Corruption by Author, No. of Articles and Citations

Name of Author	No.	Citations	Avg Cit's	Avg Cit's p.a.
Johnston, Michael	5	133	33	6
Philp, Mark	5	103	21	9
Findlay, Mark	3	15	5	1
Gregory, Robert	3	27	9	2
Kaufmann, Daniel	3	135	68	10
Lennerfors, Thomas Taro	3	29	10	2
Rothstein, Bo	3	139	46	10
Atiles, José	2	3	2	1
Beckett, Paul	2	4	2	2
Bekker, M.C.	2	0	0	0
Blanchfield, Luisa	2	0	0	0
Cao, Fuguo	2	1	1	1
Clemente, Felippe	2	1	1	0
de Sousa, Luís	2	5	3	0
Fazekas, Mihály	2	91	46	17
Gouvêa Maciel, Gustavo	2	3	2	1
Hindess, B.	2			0
Jávor, István	2	0	0	0
Korejo, Muhammad Saleem	2	7	4	2
Kupatadze, Alexander	2	3	2	1
Kurer, Oskar	2	128	64	8
Lascoumes, Pierre	2	11	6	1
Lewis, Maureen	2	0	0	0
Manzetti, Luigi	2	69	35	2
Miller, Seumas	2	0	0	0
Nowak, Celina	2	9	5	1
Peters, John G.	2	126	63	3
Rose-Ackerman, Susan	2	13	7	2
Ruggiero, Vincenzo	2	15	8	1
Touati, Kamel	2	0	0	0
Walton, G.	2			0
Walton, Grant W.	2	30	15	3
Werlin, Herbert H.	2	8	4	0
Wickberg, Sofia	2	4	2	1
Total	**929**	**10,117**	**12**	**850**

Figure 5. Seven Dimension of Fiscal Space



Source: Drawn from (Barroy et al., 2018; Laing, 2019; Okwero and World Bank, 2010, p. 49; Heller, 2005, pp. 32–33, 2006, p. 77)

Table 5. Fiscal Space Estimation Equations

Fiscal Space Dimension 1: Tax Revenue
1. Tax Revenue Dimension in % of GDP = Target or Viable Tax To GDP ratio - Tax to GDP ratio for the country for a particular period 2. Tax Revenue Dimension in US$ = Calculated Tax Revenue Fiscal Space Dimension in % of GDP x GDP-US$ Model has 3 choices for target tax to GDP ratios: Low-20%, Moderate-30% and High-40%) Tax revenue can be at any part of the public sector that has data available *Source: IMF GFS Database*
Fiscal Space Dimension 2: Efficiency
1. Efficiency Dimension in % of GDP = Calculated Estimated Efficiency Losses for the country for a particular period in US$ / GDP for same period 2. Efficiency Dimension in US$ = Estimated Efficiency Losses for the country for a particular period in US$ x discount factor for absorptive capacity/viability positions Model has 3 choices for discount factors: No Discount, Low-20% and High-50%) Efficiency figures can be at any part of the public sector that has data available *Source: Costing Database*
Fiscal Space Dimension 3: Grant (Aid) Revenue
1. Grant (Aid) Revenue Dimension in % of GDP = Absorptive Capacity Limit as % of GDP – ODA to GDP ratio for the country for particular period 2. Grant (Aid) Revenue Dimension in US$ = Calculated Grant (Aid) Revenue Dimension in % of GDP x GDP-US$ Model has 3 choices for Absorptive Capacity Limit (aid/GDP): Low-10%, Moderate-15% and High-20%) Aid figures can be at any part of the public sector that has data available and any type, channel of aid adjusted in the back end of the model *Source: OECD-DAC-CRS database*
Fiscal Space Dimension 4: Balance Sheet (Debt)
1. Debt Dimension in % of GDP = IMF DSA Threshold for external debt as % of GDP – External Debt to GDP ratio for the country for a particular period 2. Debt Dimension in US$ = Calculated Debt Dimension in % of GDP x GDP-US$ Model has 3 choices for IMF DSA (Total Public Debt/GDP) thresholds: Weak-35%, Medium-55% and Strong-70%) (IMF External Debt/GDP) thresholds: Weak-30%, Medium-40% and Strong-55%) Public and external debt figures can be at any part of the public sector that has data available *Source: WDI*

Figure 6. USA Fiscal Space V1: Low Tax, Strong Borrowing, Very Strong NATO Defense and Aid Targets

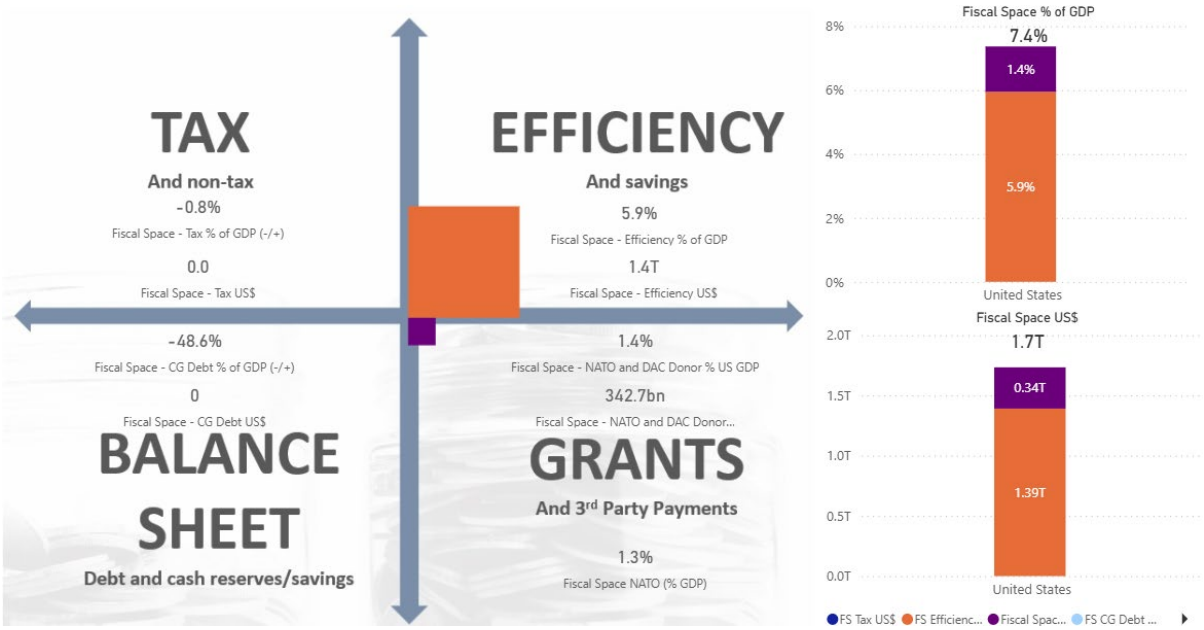


Figure 7. USA Fiscal Space V2: Low Tax, <u>Strongest</u> Borrowing, Very Strong NATO Defense and Aid Targets

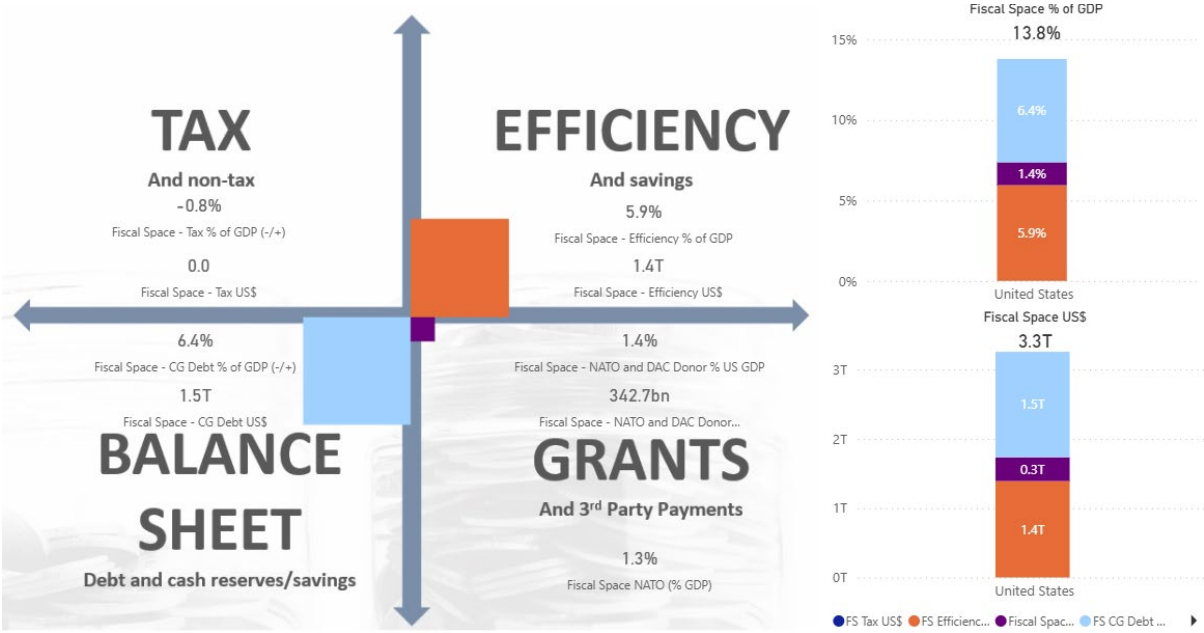


Figure 8. USA Fiscal Space V3: <u>Moderate</u> Tax, Strongest Borrowing, Very Strong NATO Defense and Aid Targets

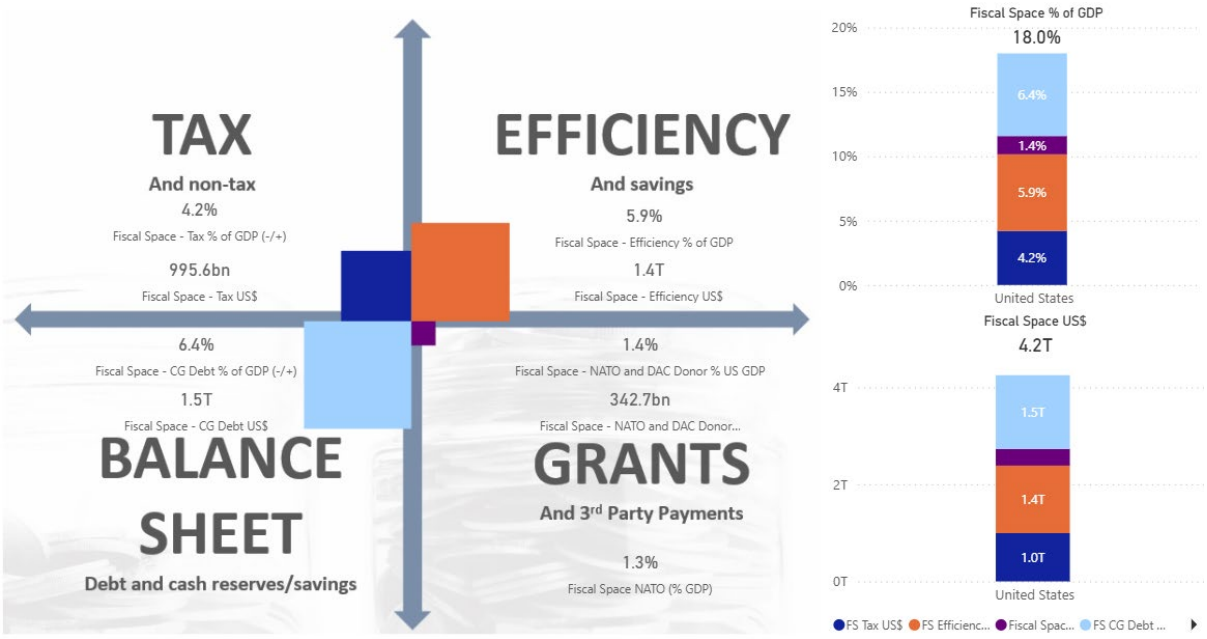
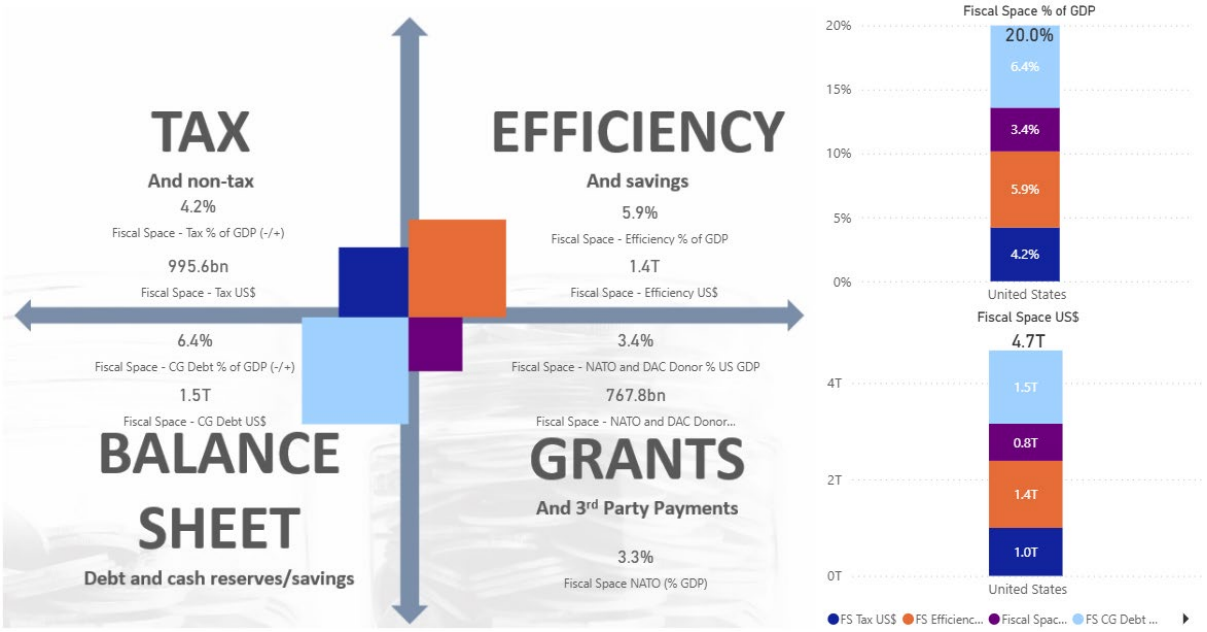
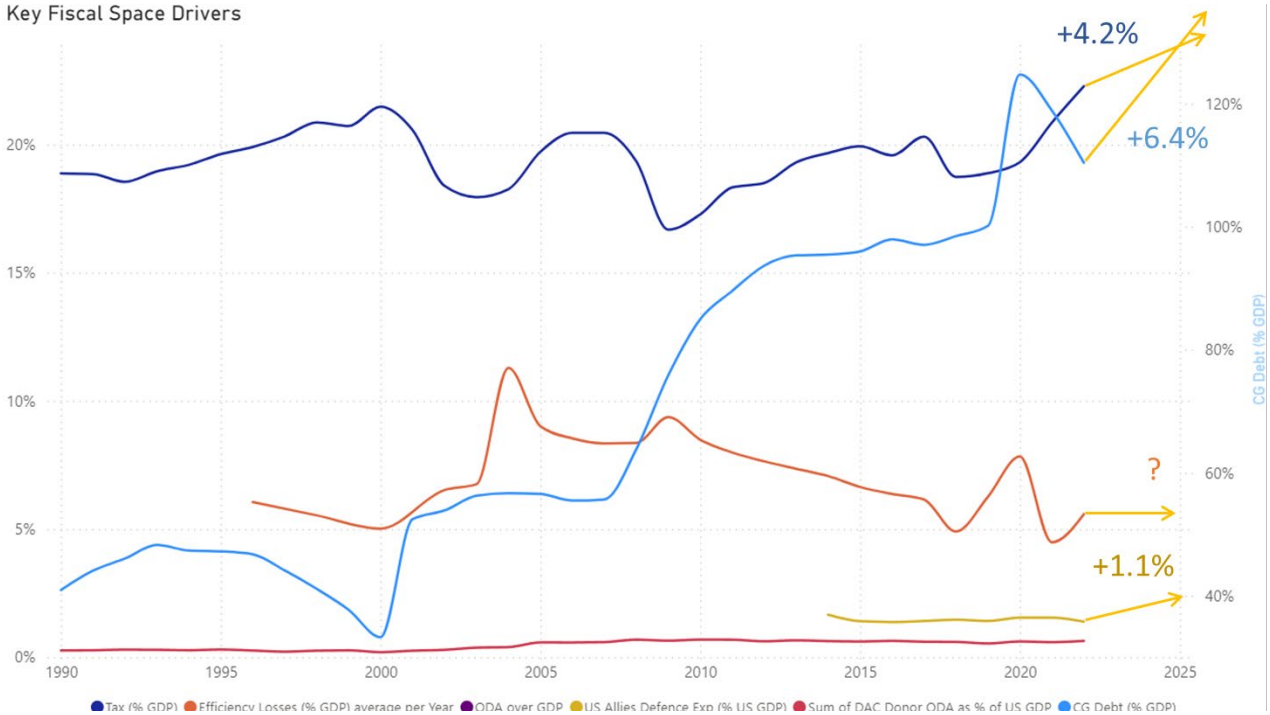


Figure 9. USA Fiscal Space V4: Moderate Tax, Very Strong Borrowing, <u>Strongest NATO Defense and Aid Targets</u>



Drivers of US Fiscal Space

Figure 10. Trends of US Fiscal Space Drivers (and Future Directions)



Detailed Inspection of the Four Dimensions of US Fiscal Space

Balance Sheet - Net Worth

Figure 11. The General Government Balance Sheet and Net Worth

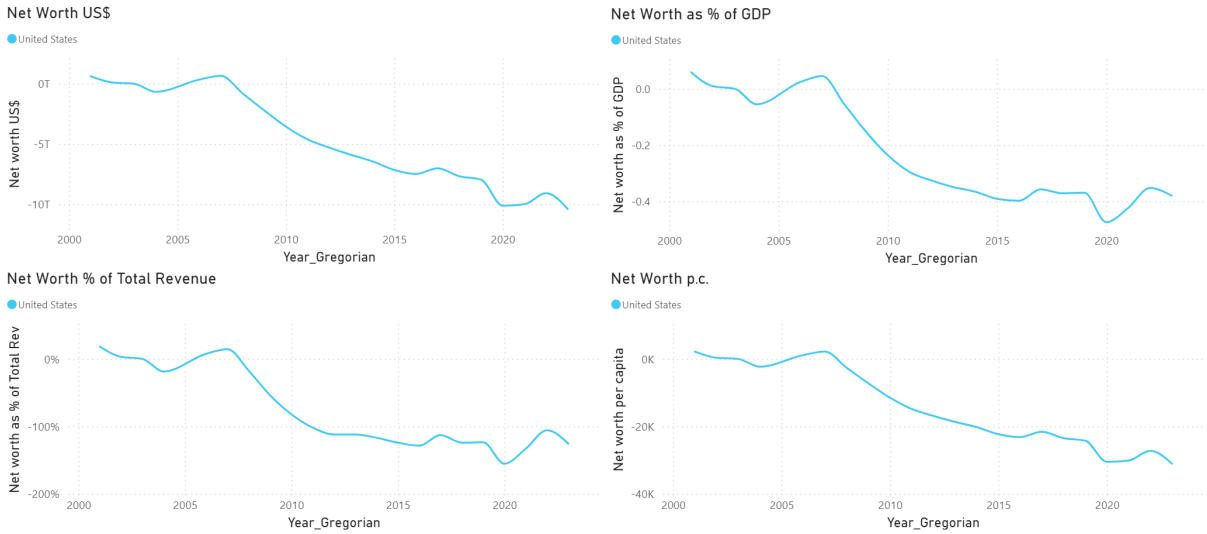


Figure 12. The State Government Balance Sheet and Net Worth

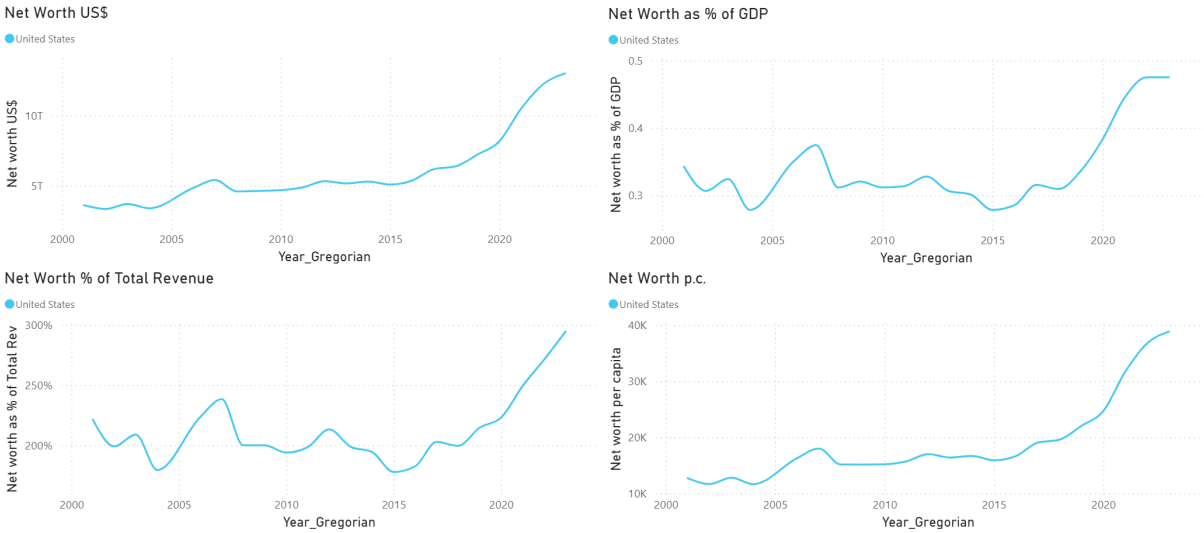
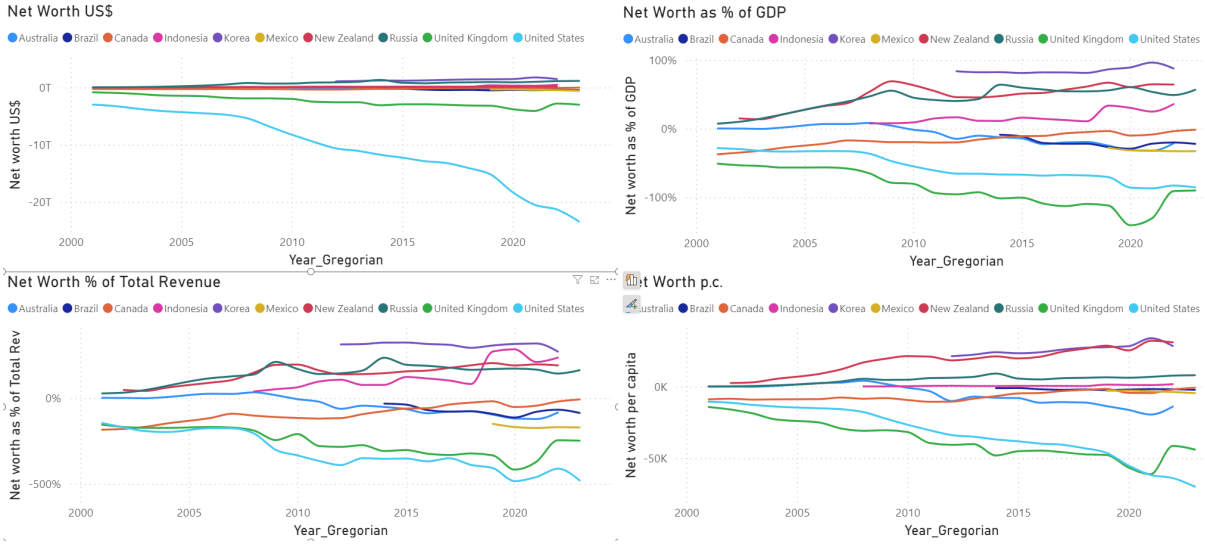


Figure 13. The Central Government (with SSF) Balance Sheet and Net Worth: G20+ (10)



Nb: Only 10 of the G20+ countries have net worth data on the GFS database

Figure 14. The General Government Balance Sheet and Liabilities

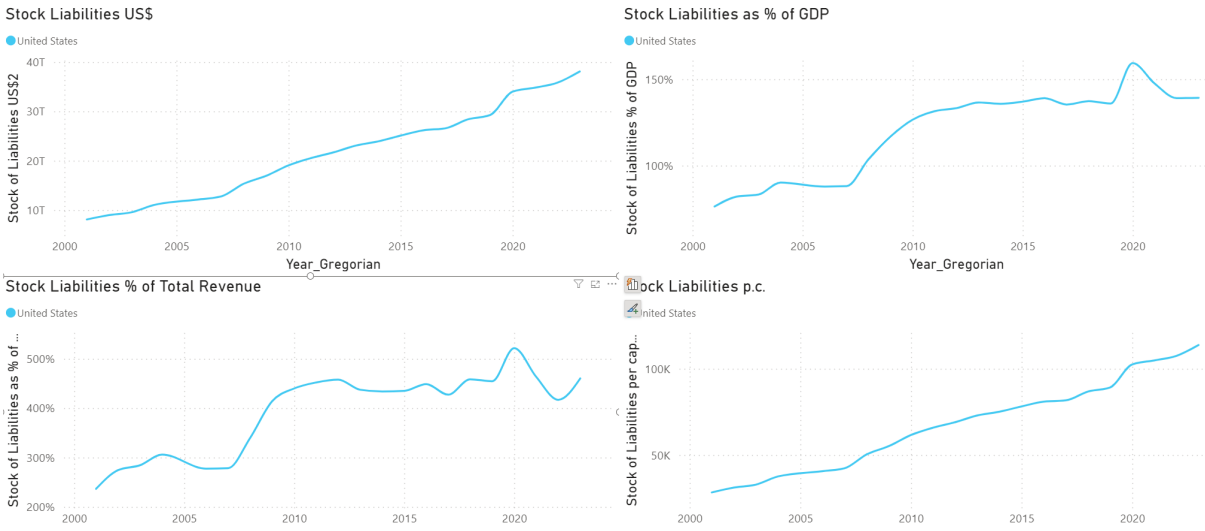


Figure 15. The State Government Balance Sheet and Liabilities

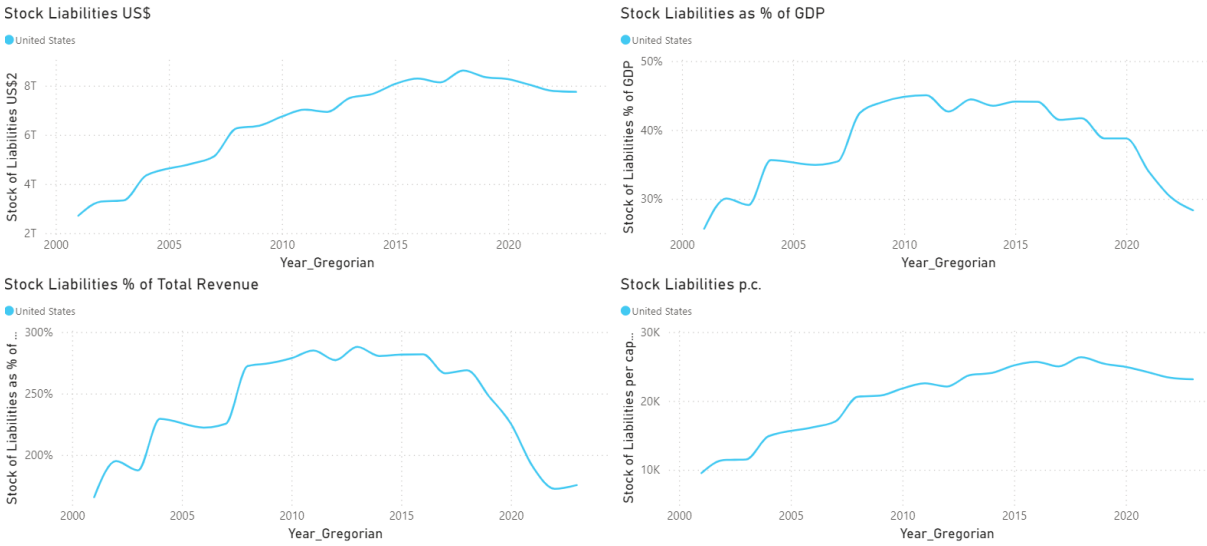
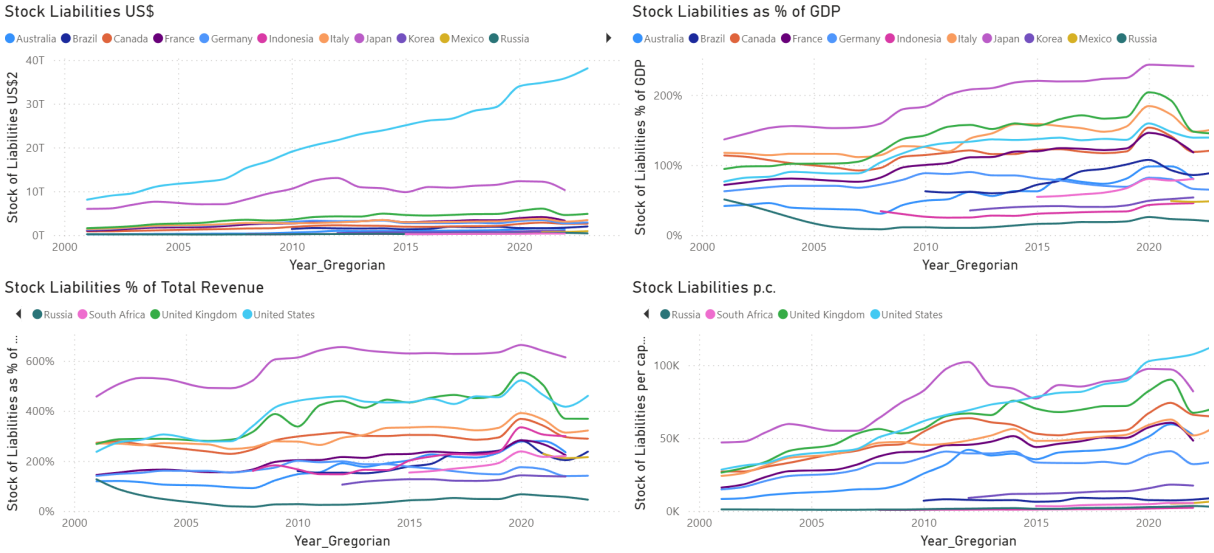


Figure 16. The General Government Balance Sheet and Liabilities: G20+5



Balance Sheet – Non-Financial Assets

Figure 17. The General Government Balance Sheet and Non-Financial Assets

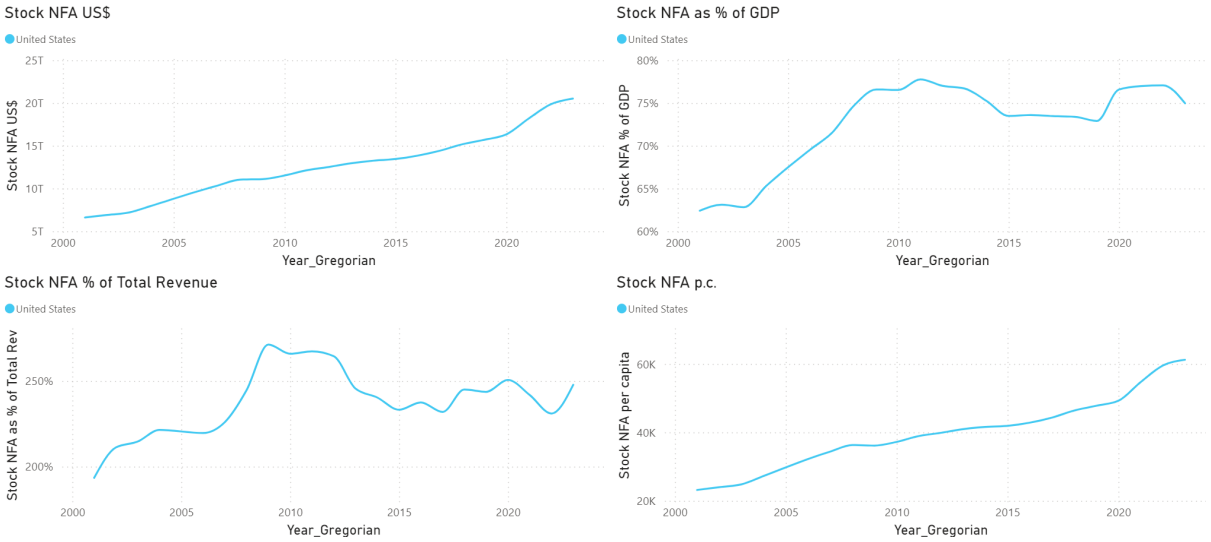


Figure 18. The Central/Federal Government Balance Sheet and Non-Financial Assets

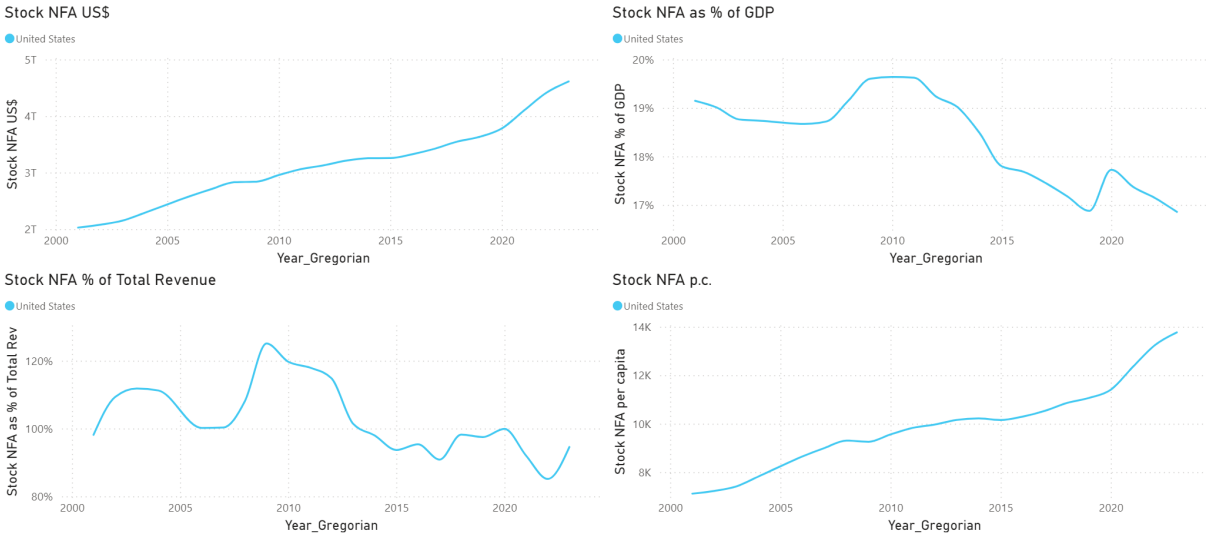


Figure 19. The General Government Balance Sheet and Non-Financial Assets: G20+5

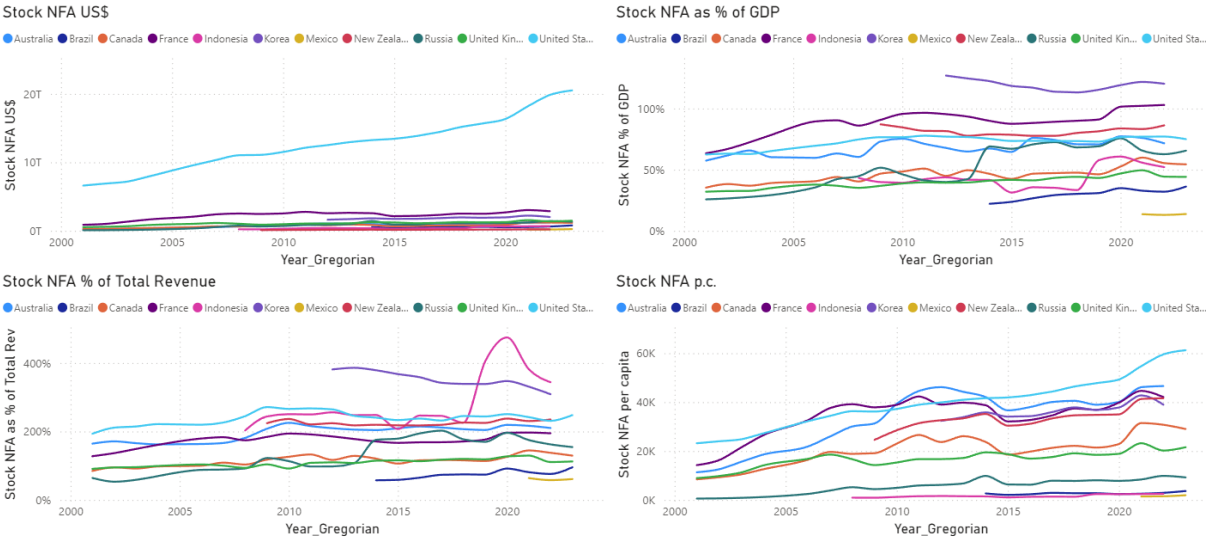


Figure 20. The General Government Balance Sheet and Financial Assets

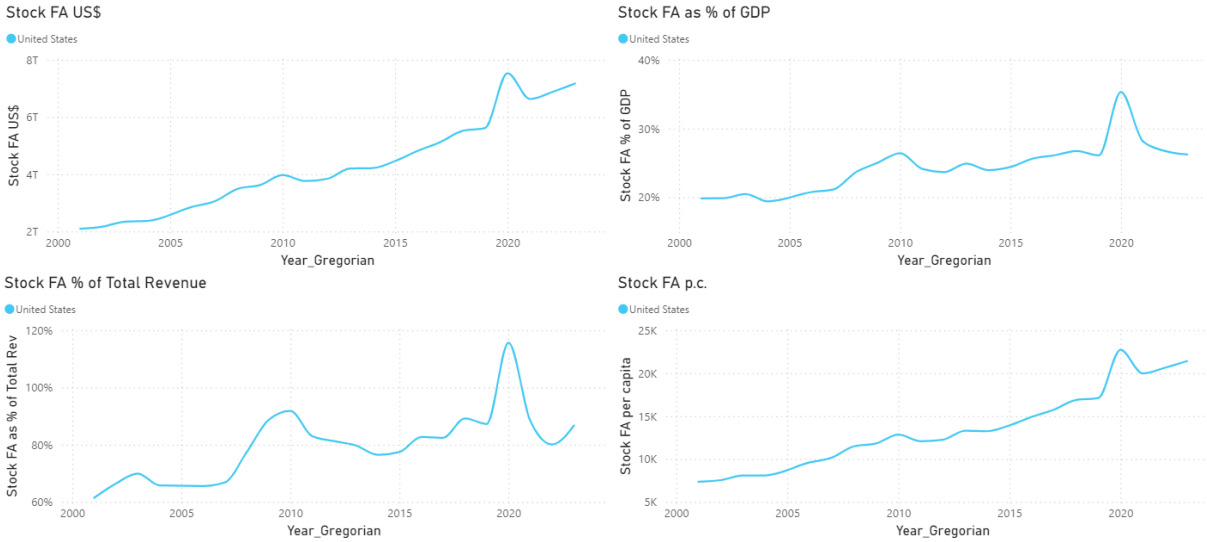


Figure 21. The State Government Balance Sheet and Financial Assets

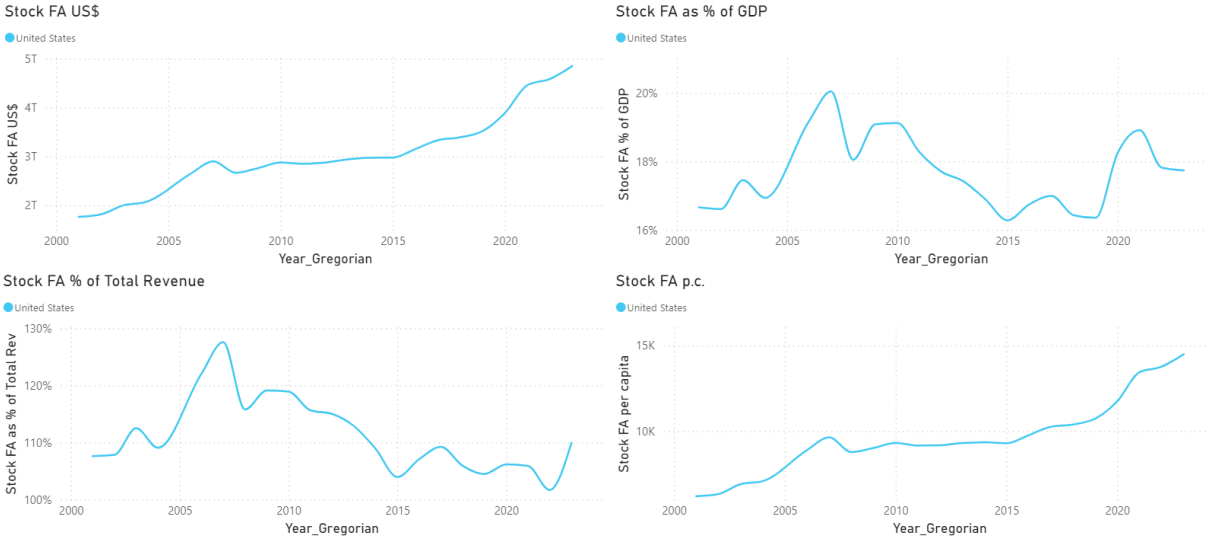
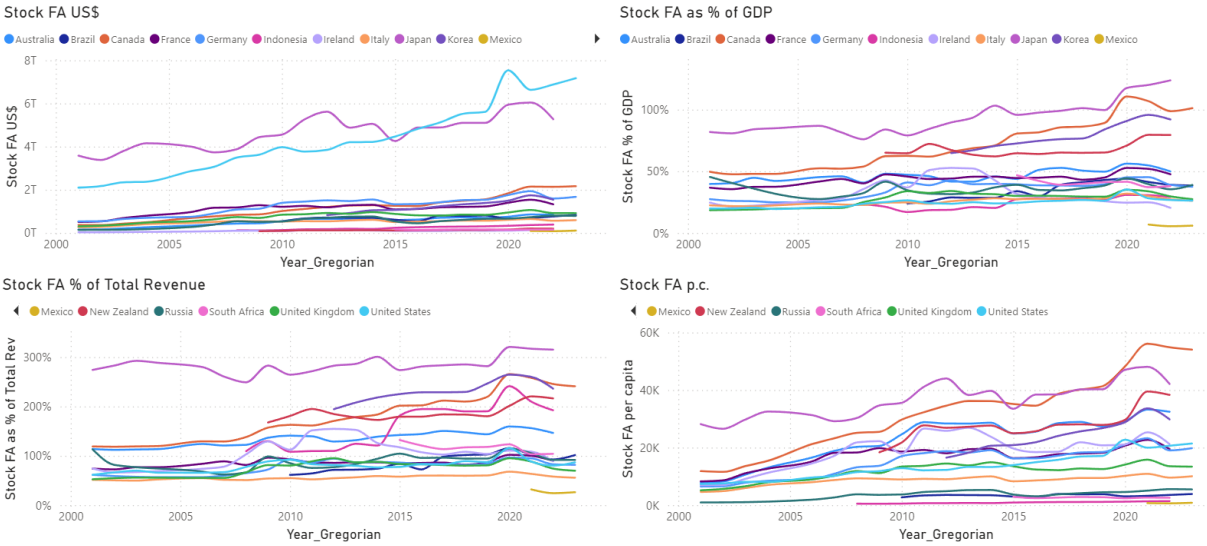


Figure 22. The General Government Balance Sheet and Financial Assets: G20+5



Taxes

Figure 23. The General Government Taxes

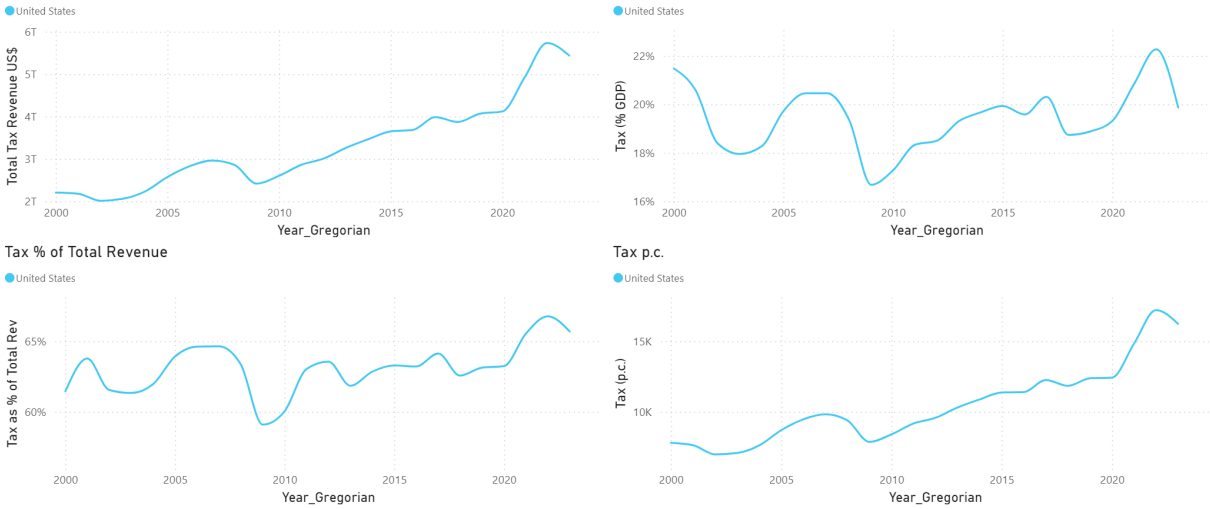


Figure 24. The State Government Taxes

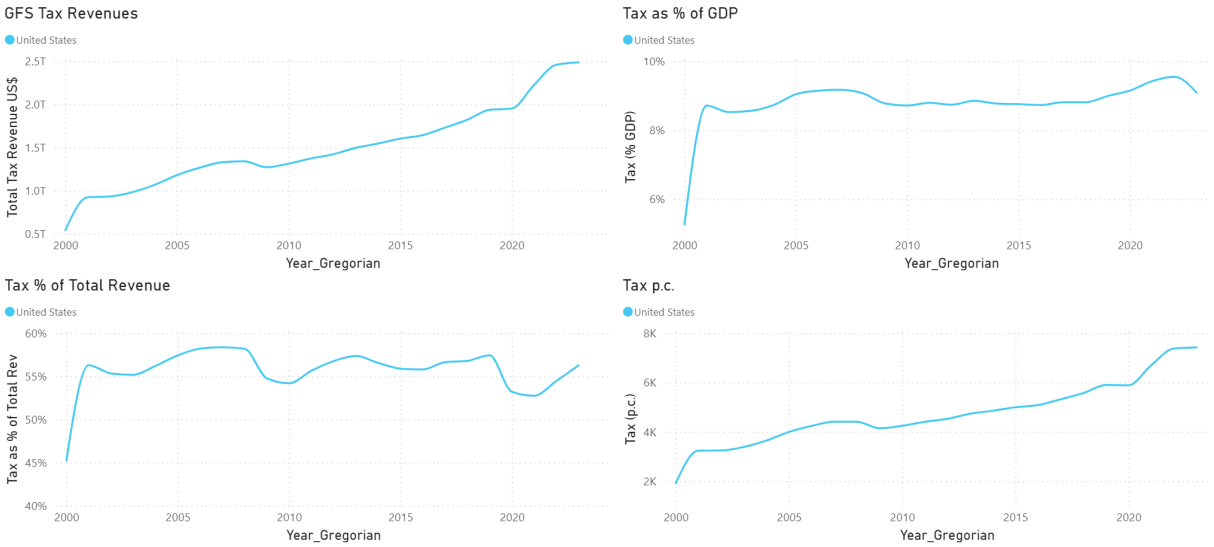


Figure 25. Tax Take Trends: Democrat V's Republican Presidencies

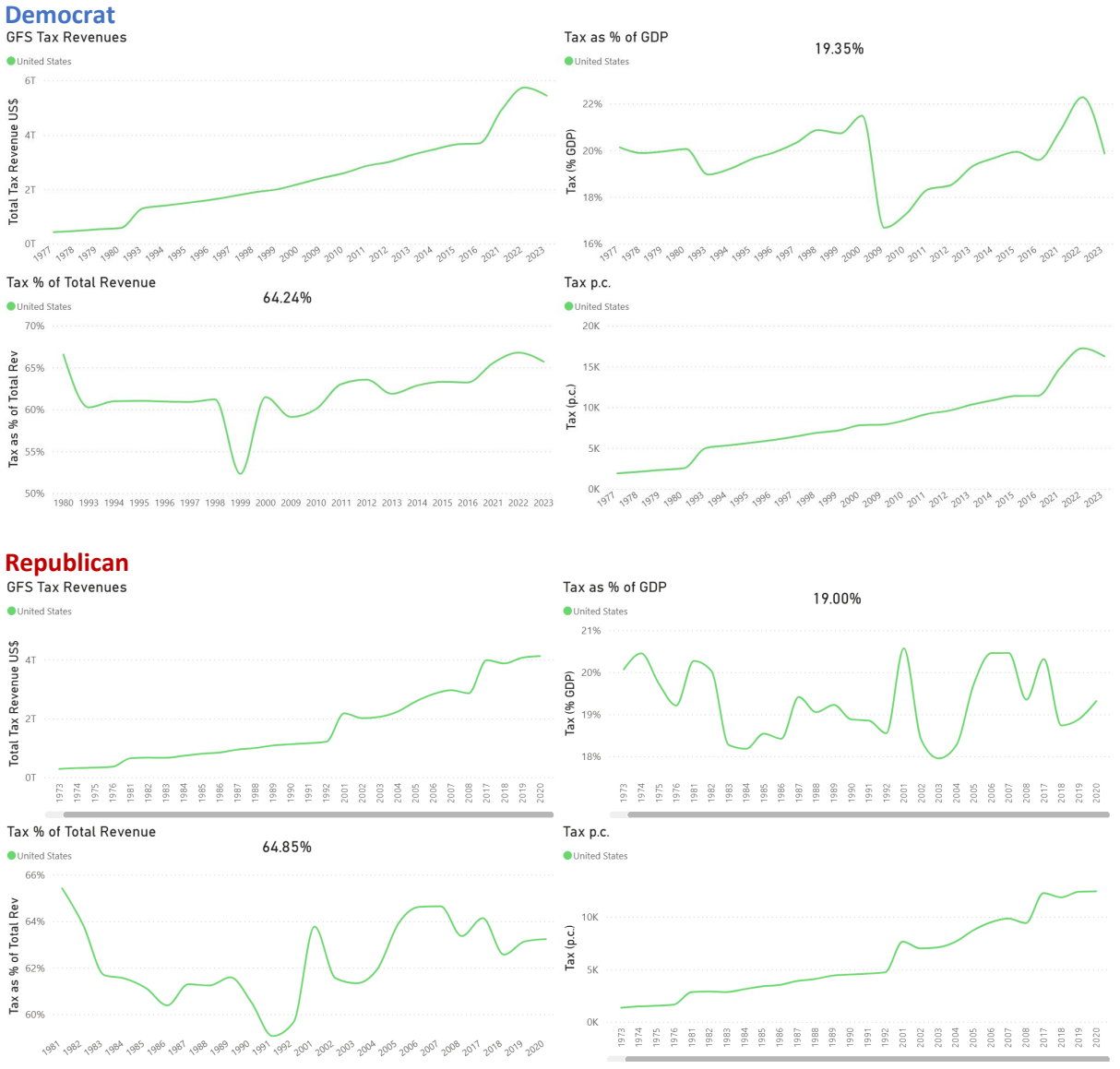
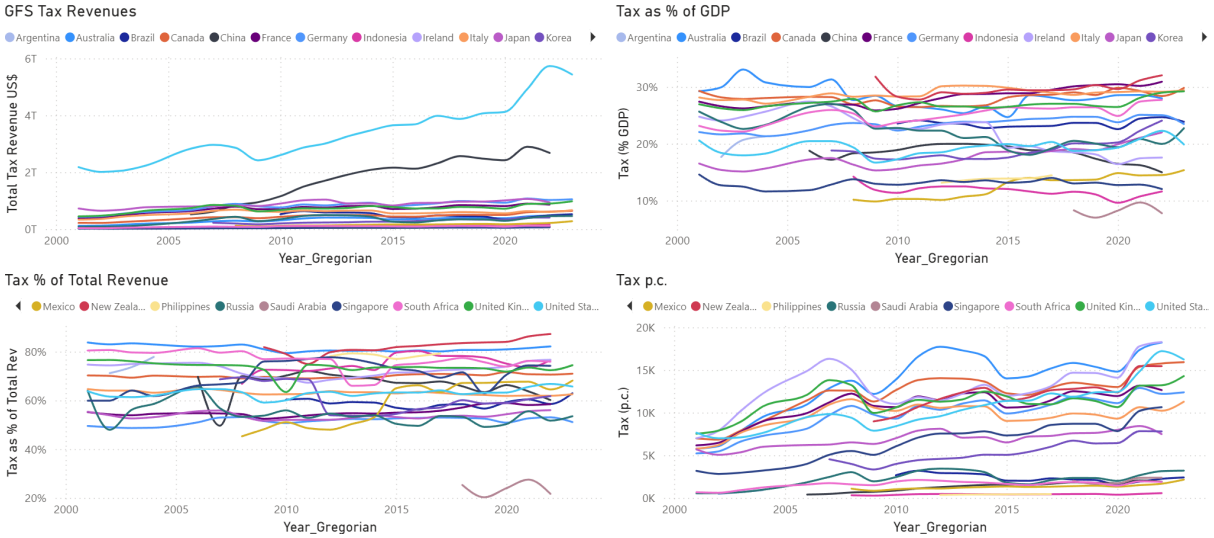


Figure 26. The General Government Taxes: G20+5



Fiscal Space and Tax and Some Other Comparators

Taxes

Figure 27. The General Government Taxes: Region

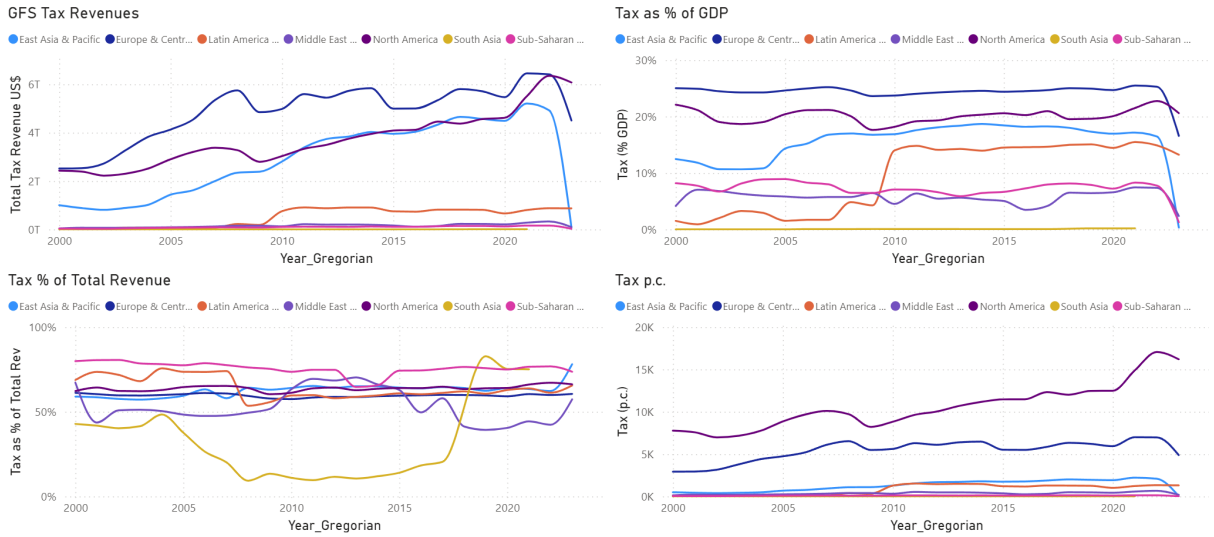


Figure 28. The General Government Taxes: Income Group

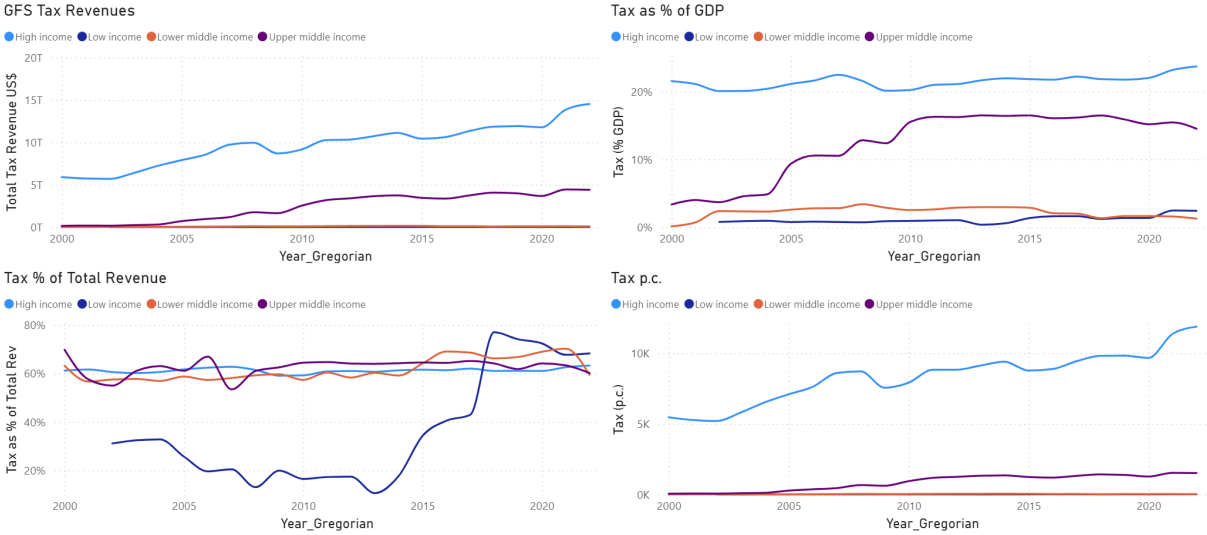


Figure 29. The General Government Taxes: Dominant Religious Group

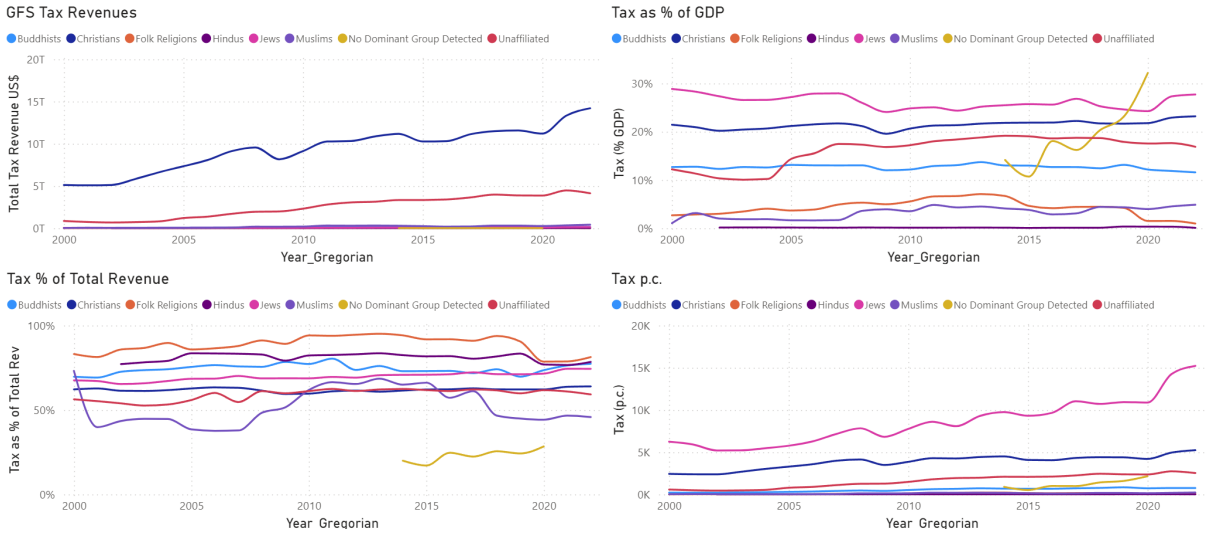


Figure 30. The General Government Taxes: Coruption Perceptions Index (CPI)

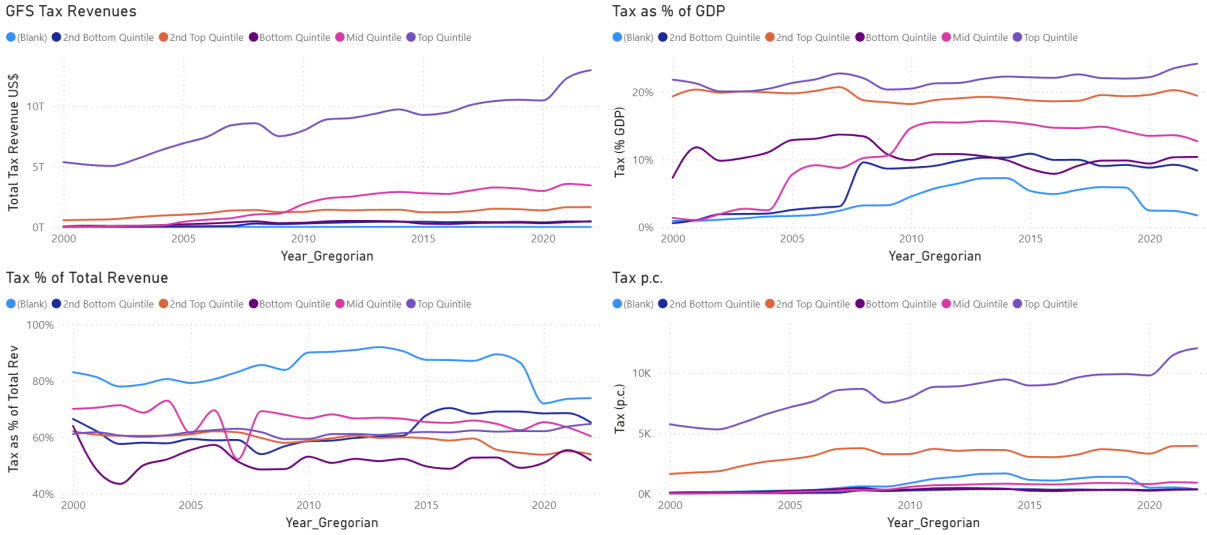


Figure 31. The General Government Taxes: Natural Resource Dependency

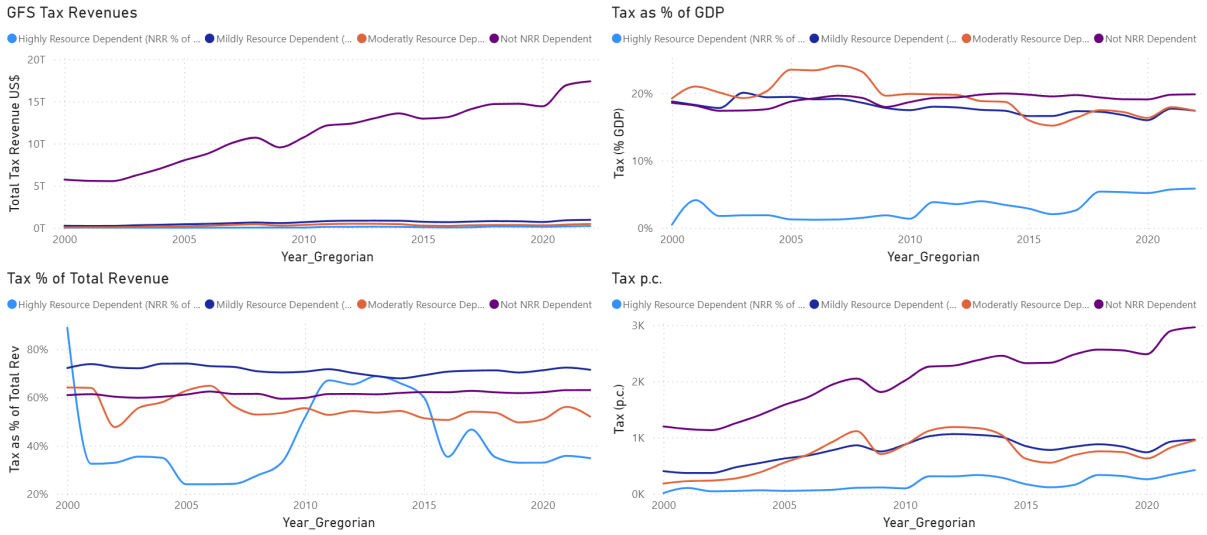


Figure 32. The General Government Taxes: Diversity (Fractionalization)

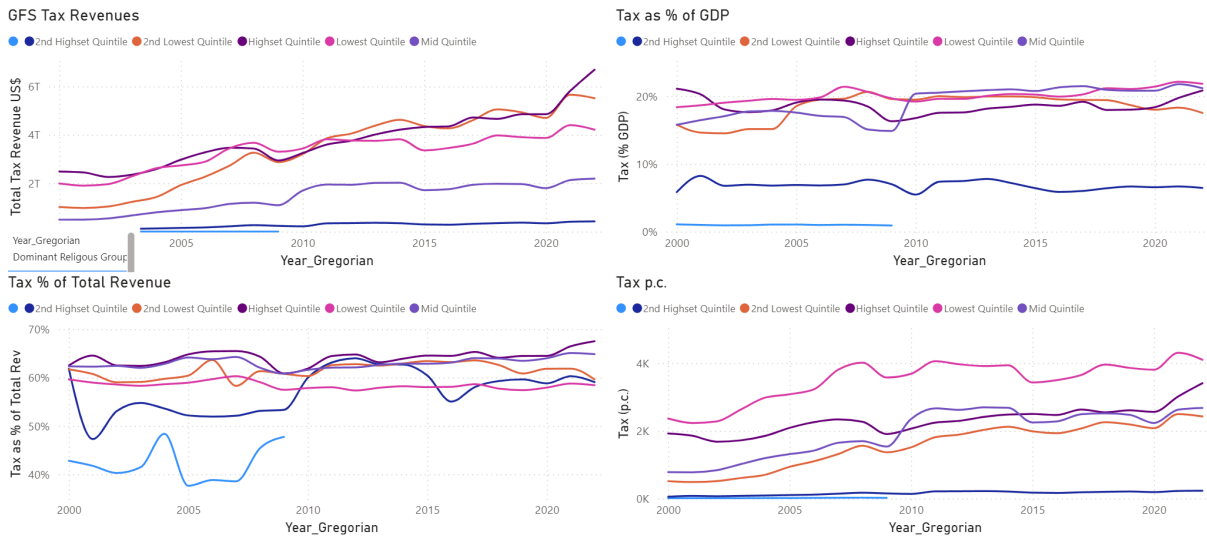


Figure 33. The General Government Taxes: Legal Tradition

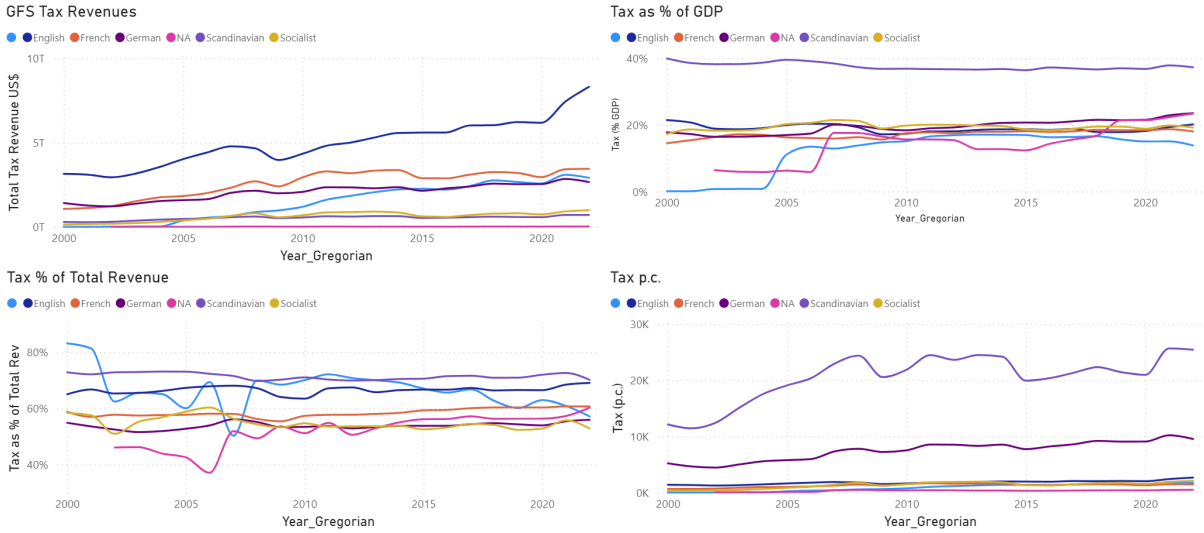


Figure 34. The General Government Taxes: State Fragility (FSI 2022)

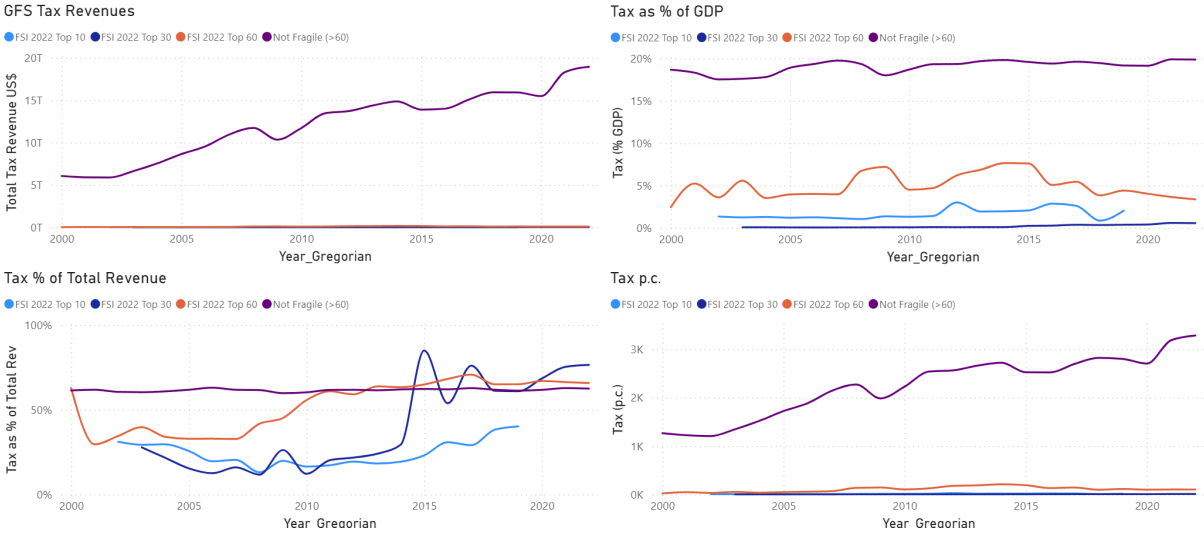


Figure 35. The General Government Taxes: BTI Democracy Status

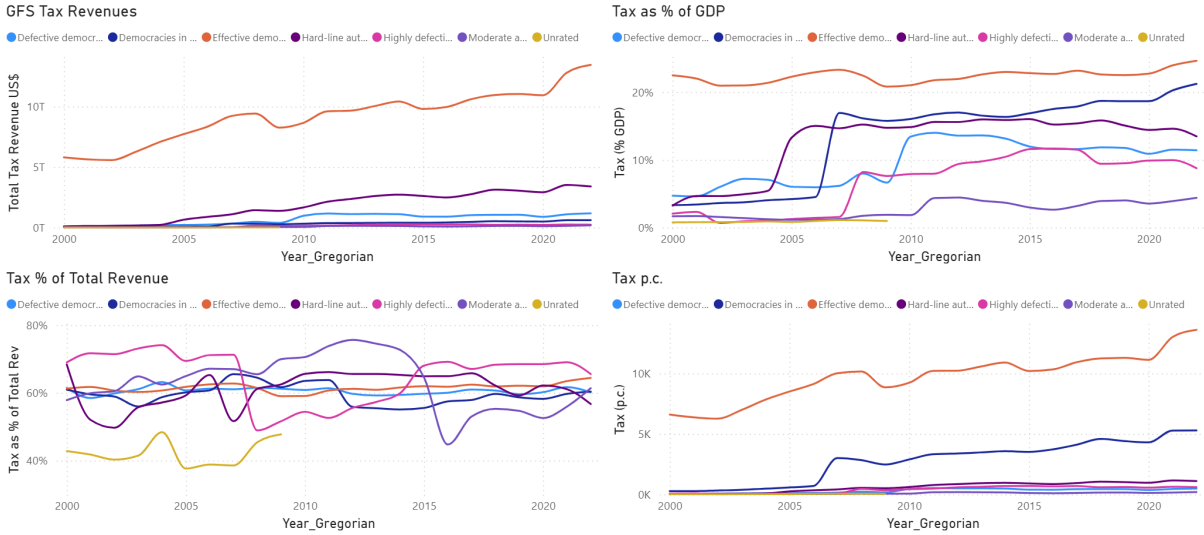


Figure 36. BTI Democracy Status, Difficulty and Religions

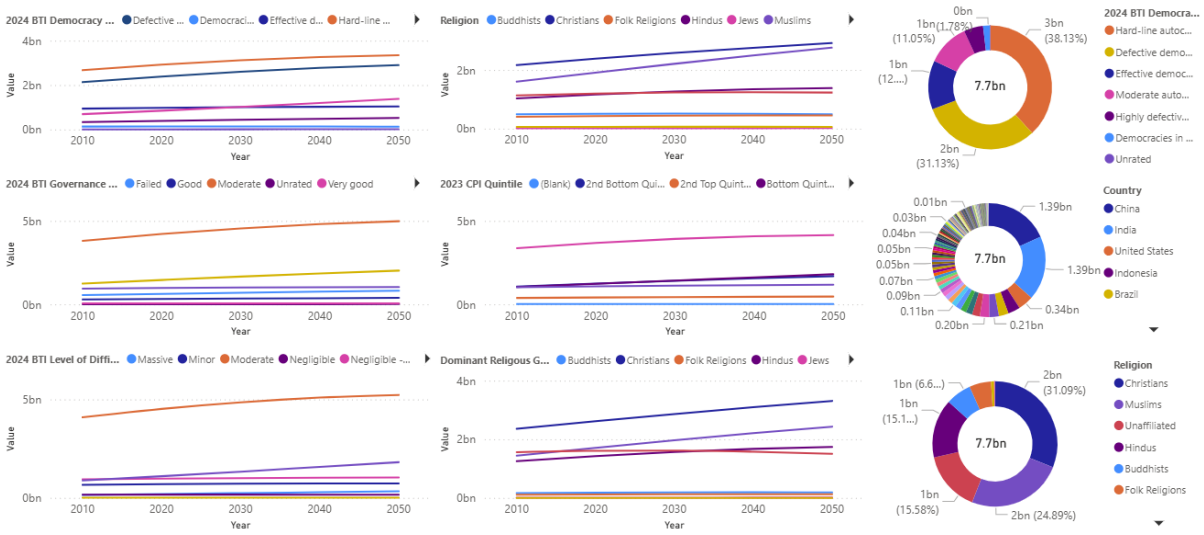


Figure 37. The General Government Taxes: System of Government

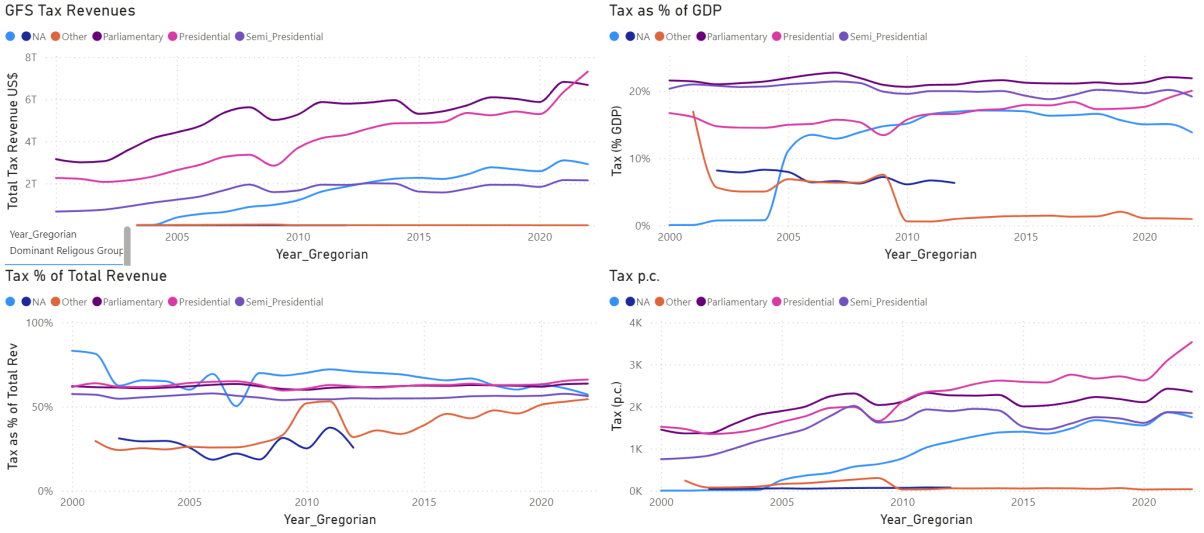


Figure 38. The General Government Taxes: Political Finance Regulation (RoPFI)

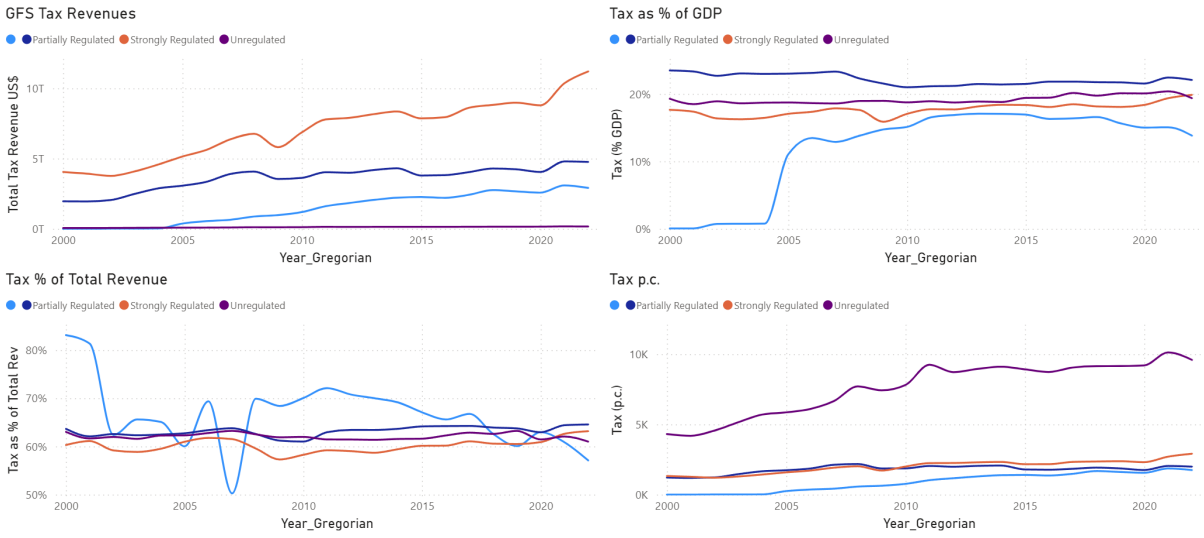


Figure 39. The General Government Taxes: Tariffs (1973-23)

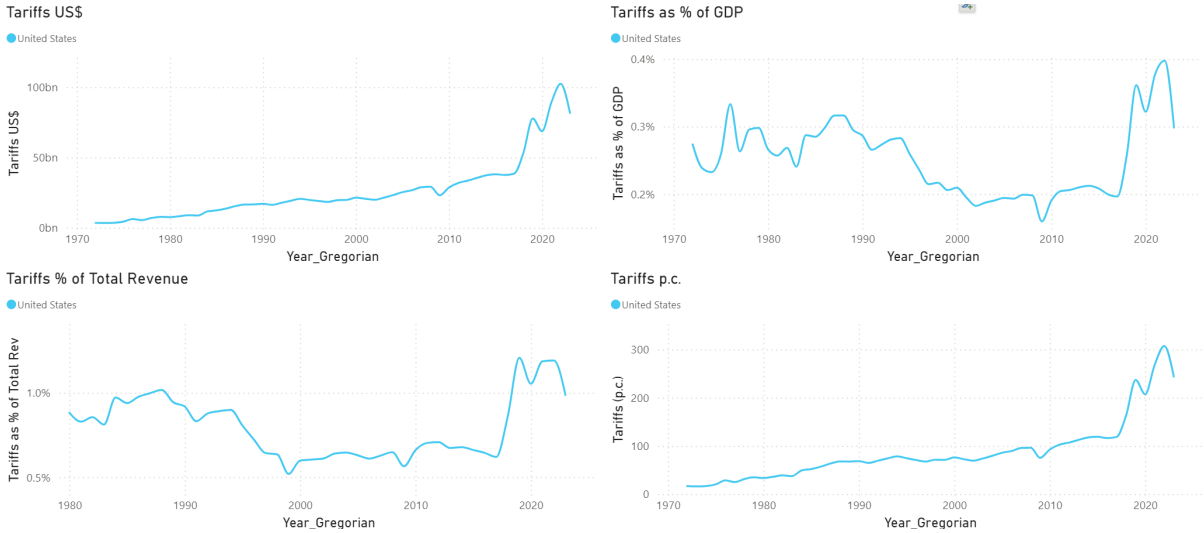


Figure 40. The General Government Tariffs: G20+5

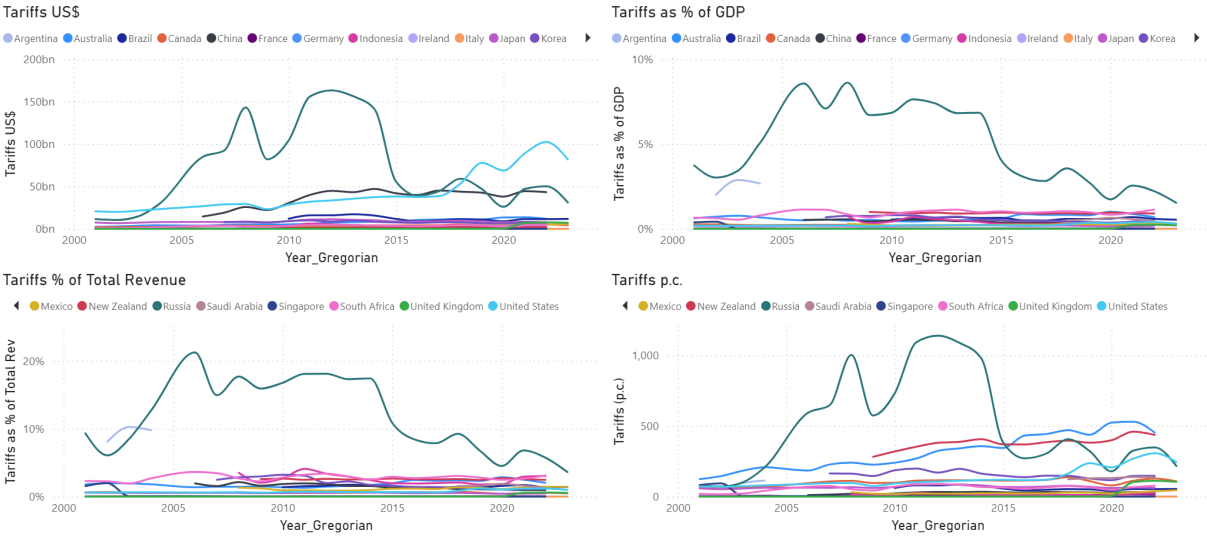
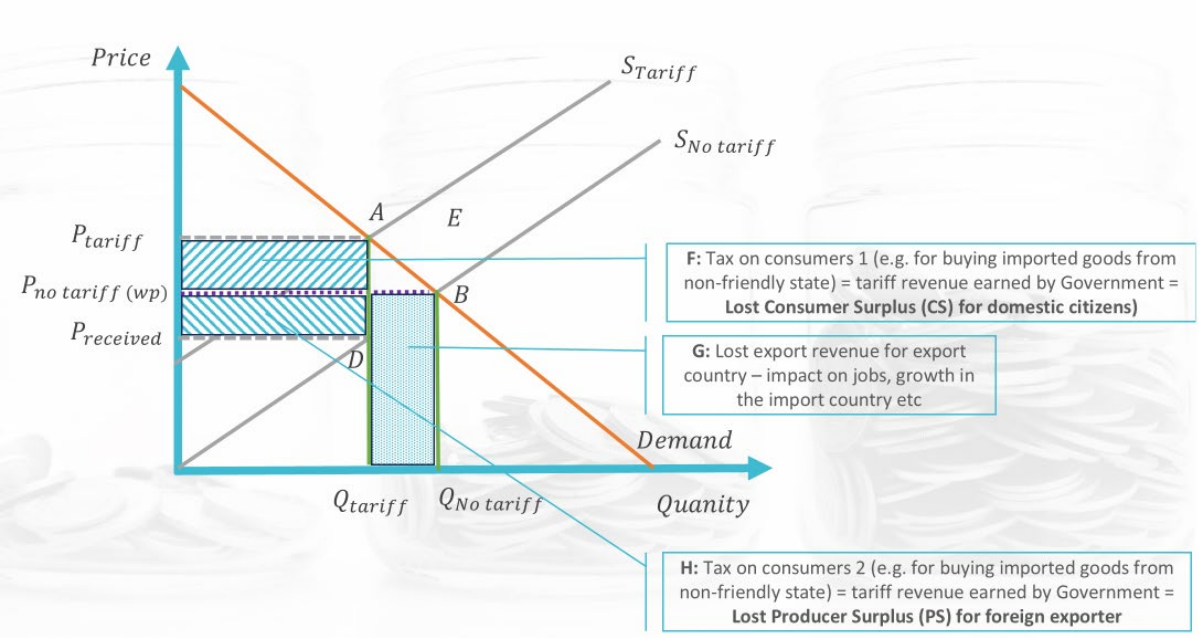


Figure 41. Geopolitical Tarif Incidence Big Market Analysis



Tariffs and Growth

Figure 42. The General Government Taxes and Growth: Selected Countries

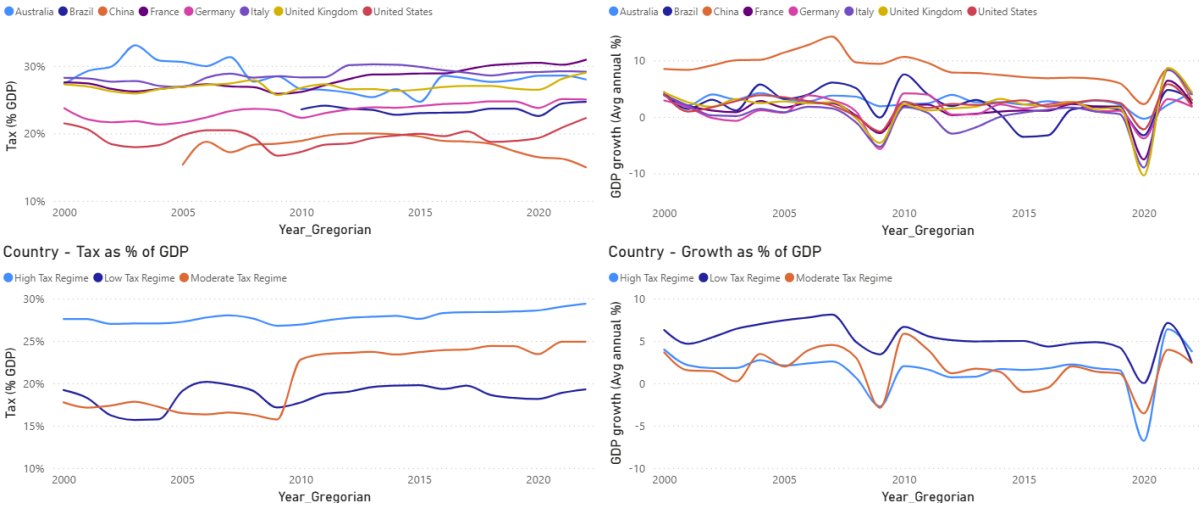


Figure 43. The General Government Taxes and Growth: G20

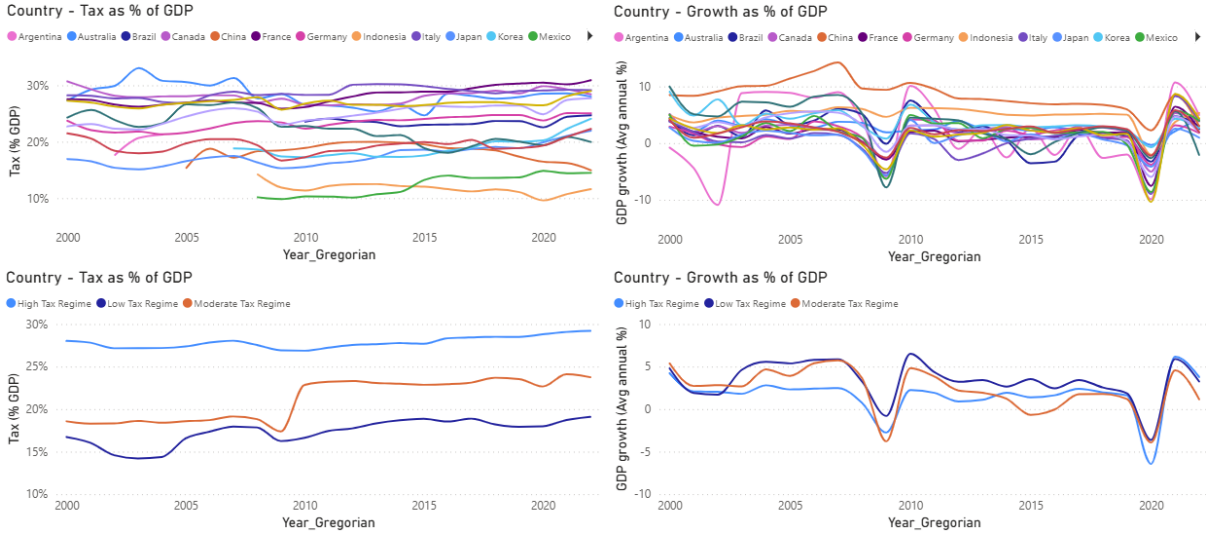


Figure 44. The General Government Taxes and Growth: All Countries

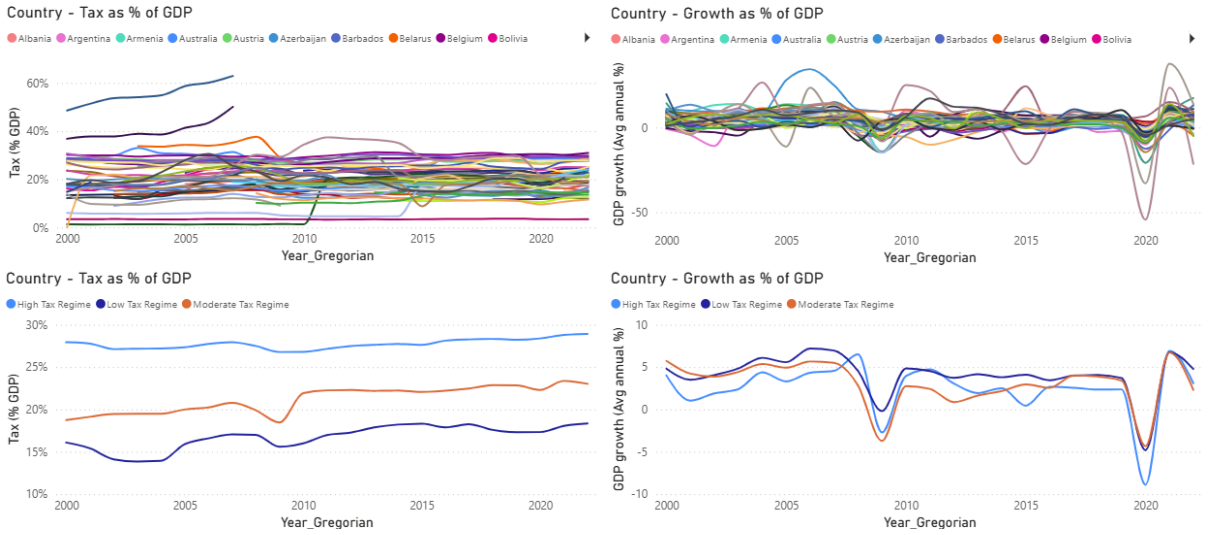


Figure 45. The General Government Taxes and Growth: EU Vs US

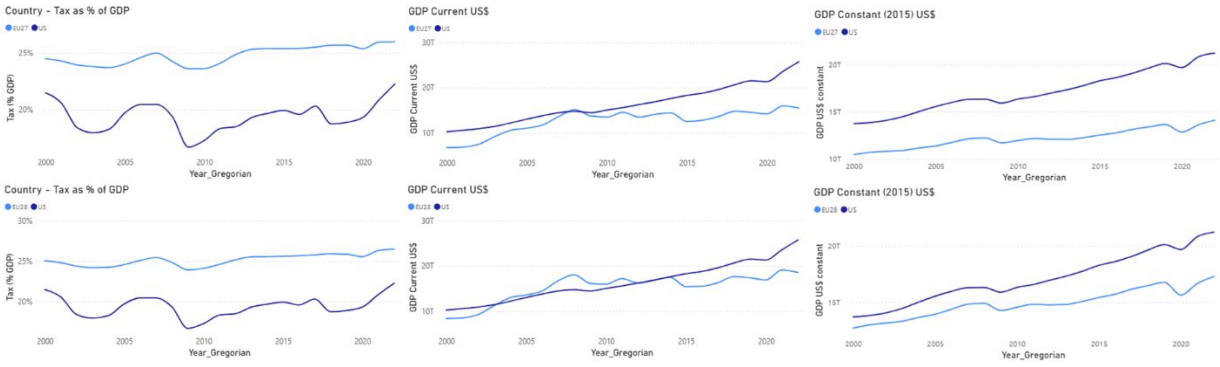


Figure 46. GG Taxes and Growth: Region and Income Groups (All countries)

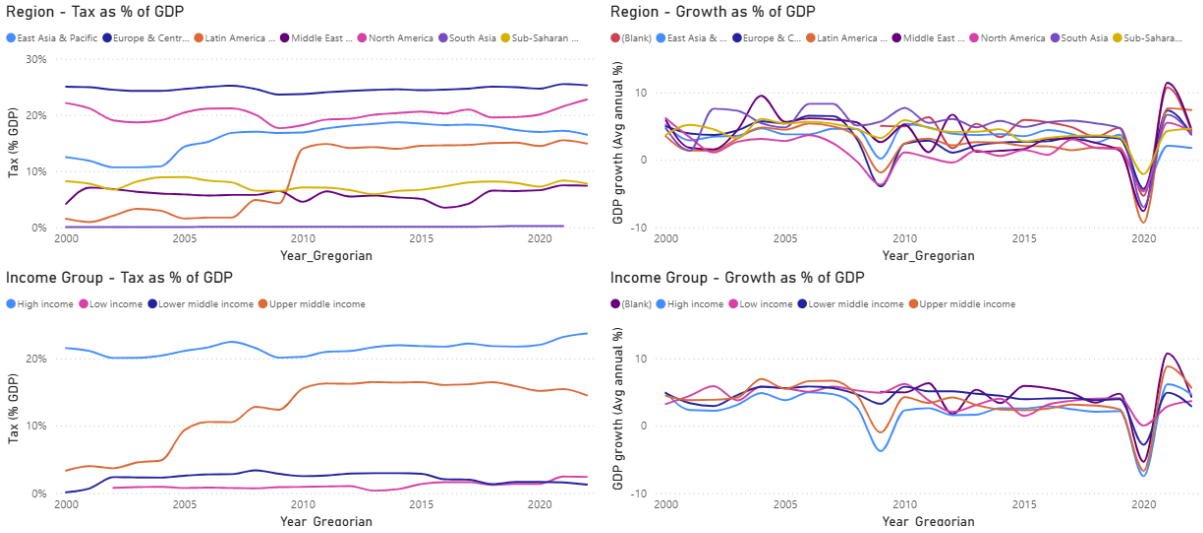


Figure 47. GG Taxes and Growth: Religion and TI CPI (All countries)

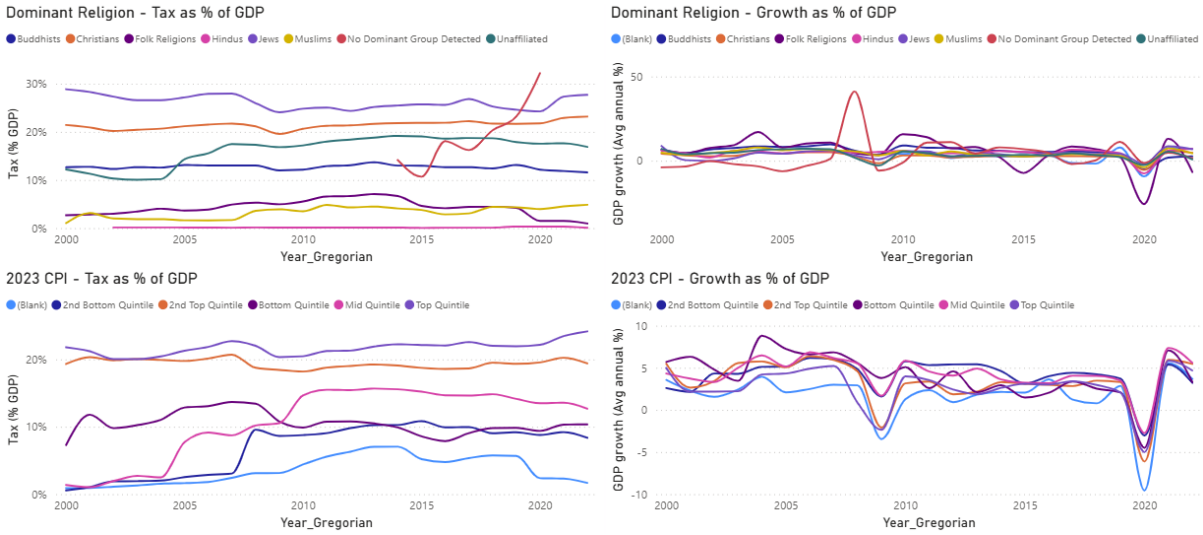


Figure 48. GG Taxes and Growth: Natural Resource Dependency and Diversity

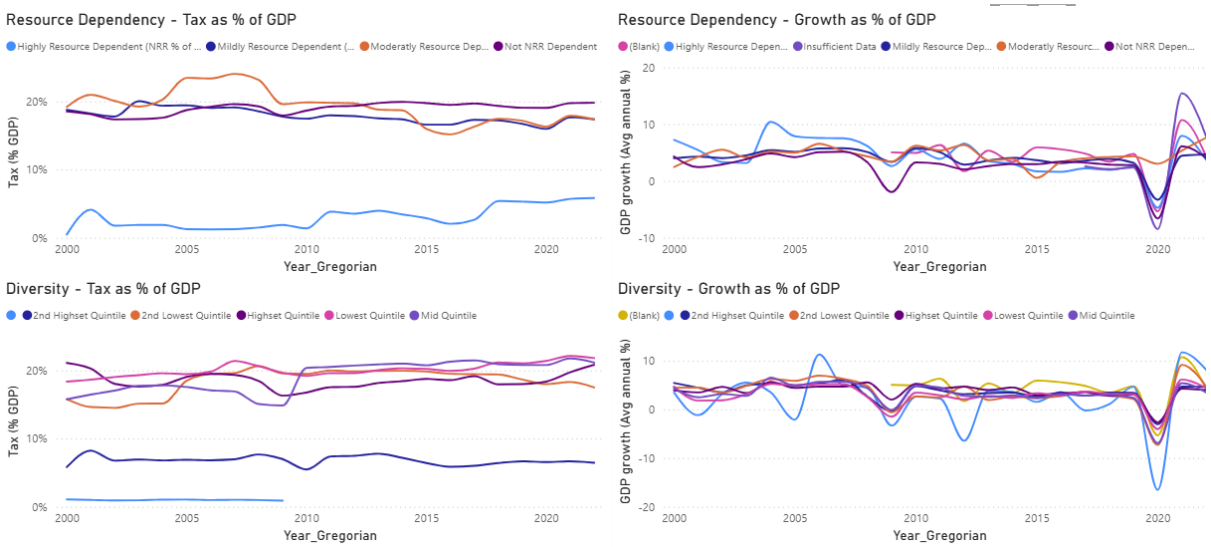


Figure 49. GG Taxes and Growth: Legal Tradition and Fragility

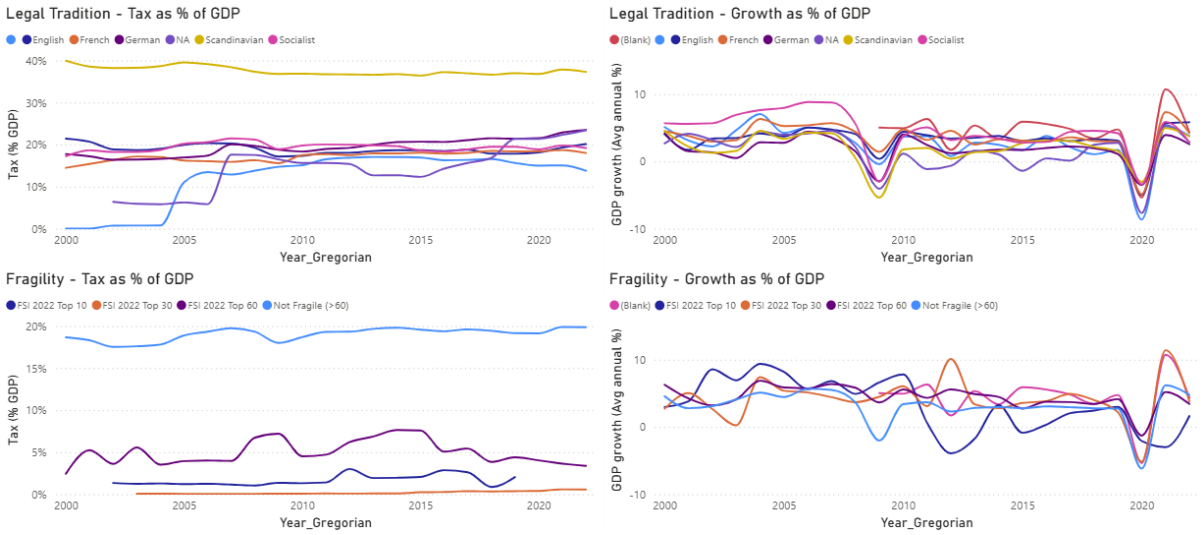


Figure 50. GG Taxes and Growth: BTI Democracy Status and Difficulty

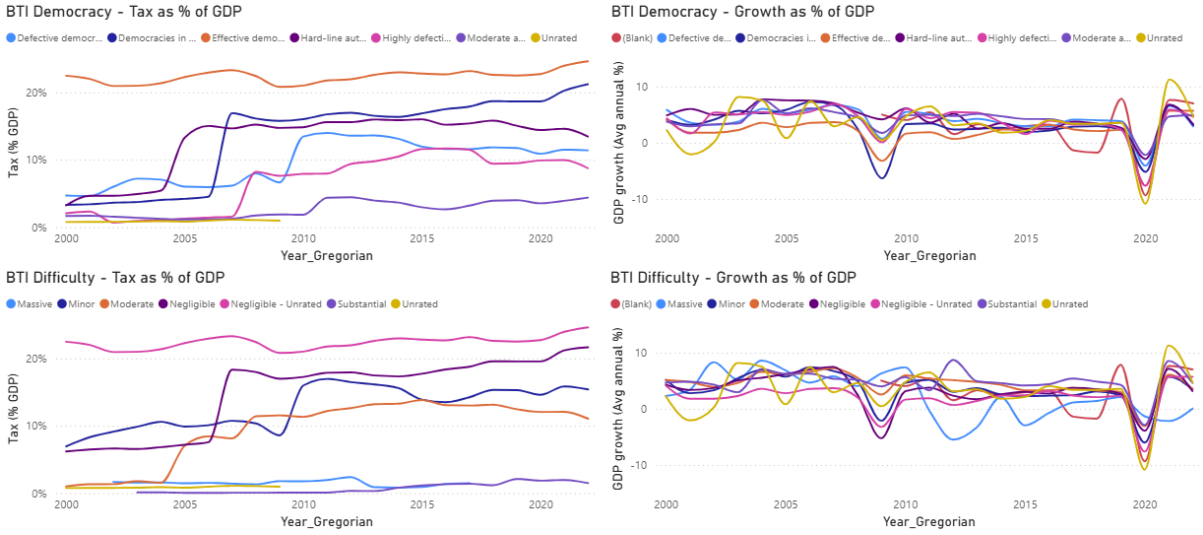
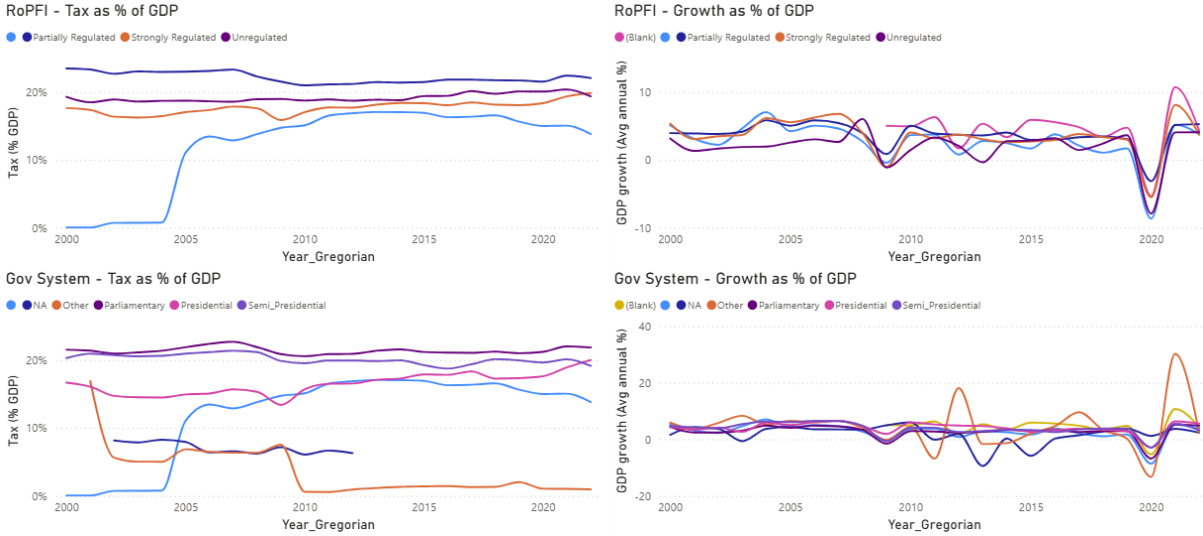


Figure 51. GG Taxes and Growth: Political Finance Regulations (RoPFI) & Gov System



Grants

Figure 52. Grants and 3rd Party Payments: NATO Spending

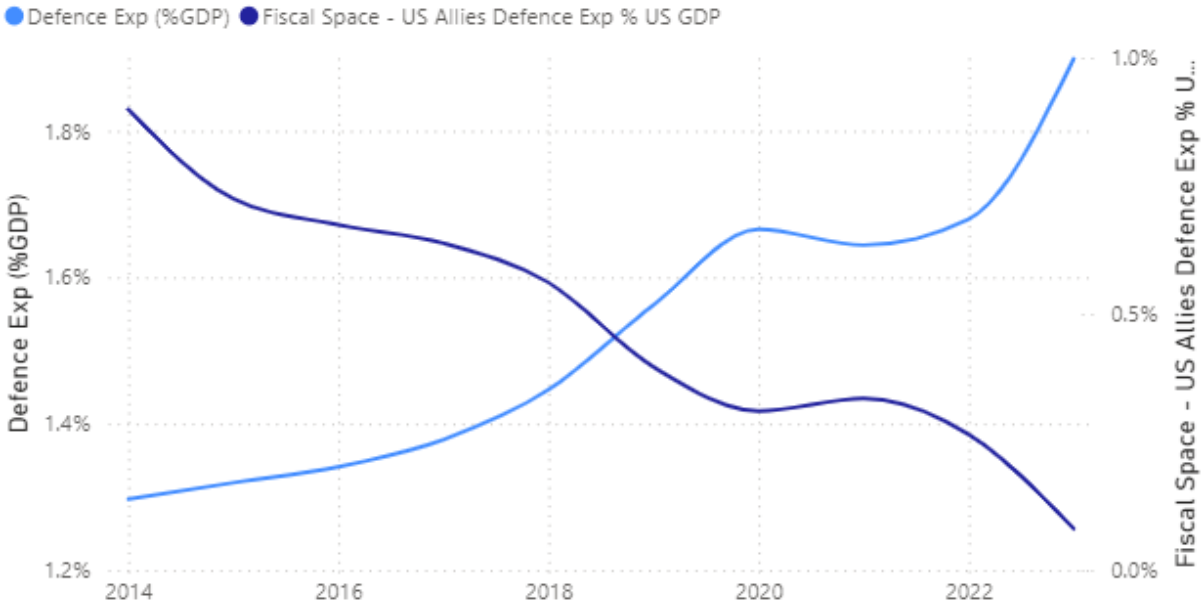


Table 6. Allied US Defence Spending (% of GDP and US$)

Allied Country	2014	2015	2016	2017	2018	2019	2020	2021	2022	202
Greece	2.22%	2.31%	2.40%	2.38%	2.54%	2.45%	2.91%	3.70%	3.86%	3.01%	**2.78%**
Poland	1.88%	2.23%	2.00%	1.89%	2.02%	1.99%	2.23%	2.22%	2.40%	3.90%	**2.27%**
United Kingdom	2.14%	2.03%	2.08%	2.07%	2.10%	2.08%	2.35%	2.30%	2.16%	2.07%	**2.14%**
Estonia	1.93%	2.03%	2.07%	2.01%	2.01%	2.05%	2.30%	2.02%	2.16%	2.73%	**2.13%**
France	1.82%	1.78%	1.79%	1.78%	1.81%	1.81%	2.00%	1.91%	1.88%	1.90%	**1.85%**
Lithuania	0.88%	1.14%	1.48%	1.71%	1.97%	2.00%	2.07%	1.97%	2.47%	2.54%	**1.82%**
Latvia	0.94%	1.03%	1.44%	1.59%	2.06%	2.02%	2.15%	2.07%	2.08%	2.27%	**1.76%**
Romania	1.35%	1.45%	1.43%	1.73%	1.79%	1.84%	2.01%	1.86%	1.72%	2.44%	**1.76%**
Croatia	1.82%	1.76%	1.60%	1.64%	1.55%	1.61%	1.71%	1.98%	1.82%	1.79%	**1.73%**
Norway	1.54%	1.58%	1.73%	1.71%	1.72%	1.84%	1.97%	1.72%	1.51%	1.67%	**1.70%**
Bulgaria	1.31%	1.25%	1.24%	1.22%	1.45%	3.13%	1.59%	1.52%	1.62%	1.84%	**1.62%**
Turkey	1.45%	1.38%	1.45%	1.51%	1.82%	1.86%	1.86%	1.61%	1.36%	1.31%	**1.56%**
Finland	1.45%	1.45%	1.42%	1.38%	1.39%	1.45%	1.53%	1.40%	1.68%	2.45%	**1.56%**
Montenegro	1.50%	1.40%	1.42%	1.34%	1.37%	1.33%	1.73%	1.55%	1.41%	1.87%	**1.49%**
Slovak Republic	0.98%	1.11%	1.12%	1.10%	1.22%	1.70%	1.92%	1.74%	1.81%	2.03%	**1.47%**
Hungary	0.86%	0.90%	1.00%	1.19%	1.01%	1.34%	1.76%	1.68%	1.82%	2.43%	**1.40%**
Portugal	1.31%	1.33%	1.27%	1.24%	1.34%	1.37%	1.43%	1.53%	1.42%	1.48%	**1.37%**
Total	**1.30%**	**1.32%**	**1.34%**	**1.38%**	**1.45%**	**1.56%**	**1.67%**	**1.64%**	**1.68%**	**1.90%**	**1.52%**

Allied Country	2014	2015	2016	2017	2018	2019
United Kingdom	65,646,532,604	59,351,395,902	55,934,545,245	55,606,575,861	60,164,267,234	59,2
Germany	46,092,664,713	39,865,948,110	41,690,158,691	45,432,041,835	49,678,806,150	52,4
France	51,949,816,655	43,468,377,099	44,245,408,550	46,102,266,361	50,452,810,697	49,4
Italy	24,641,880,363	19,586,618,141	22,117,117,823	23,572,808,620	25,630,310,102	23,5
Canada	18,172,439,378	18,689,384,317	17,708,211,911	23,699,891,020	22,398,913,701	22,5
Poland	10,108,689,590	10,616,525,140	9,401,291,271	9,940,530,089	11,866,997,786	11,8
Spain	12,631,053,332	11,094,918,099	9,977,680,004	11,893,351,207	13,193,859,974	12,6
Turkey	13,583,012,949	11,956,601,506	12,649,409,111	12,971,828,256	14,154,469,976	14,1
Netherlands	10,275,713,523	8,670,898,913	9,079,538,132	9,577,739,368	11,124,006,285	12,0
Norway	7,721,750,609	6,141,838,178	6,431,235,759	6,850,411,982	7,543,632,846	7,5
Greece	5,232,468,632	4,519,157,116	4,637,943,329	4,753,920,523	5,385,605,877	5,0
Belgium	5,198,722,794	4,204,018,551	4,259,290,924	4,442,294,095	4,842,750,096	4,7
Total	**292,115,008,411**	**257,107,823,908**	**257,866,874,973**	**277,368,044,728**	**302,830,053,186**	**304,5**

Figure 53. Grants and 3rd Party Payments: Fiscal Space and DAC-Donors

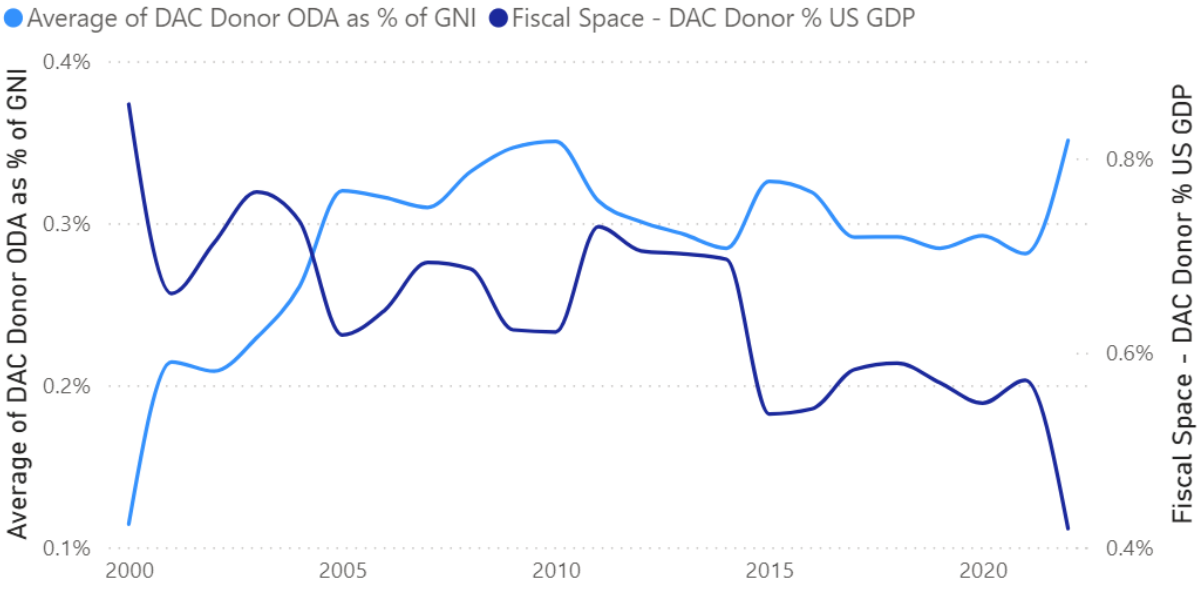


Table 7. Top Non-US Aid Donors (% of GNI and US$)

Bilateral Donor Aid as % of GNI (Using US$ Current)

Donor name (EN)	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	**Total**
Norway	0.70%	0.83%	0.86%	1.02%	0.95%	0.80%	0.85%	0.88%	0.92%	0.78%	0.77%	**0.71%**
Sweden	0.65%	0.67%	0.75%	0.97%	0.70%	0.72%	0.71%	0.66%	0.65%	0.61%	0.59%	**0.61%**
Luxembourg	0.61%	0.65%	0.61%	0.68%	0.67%	0.65%	0.69%	0.77%	0.61%	0.62%	0.68%	**0.59%**
Netherlands	0.48%	0.44%	0.47%	0.56%	0.44%	0.44%	0.42%	0.39%	0.43%	0.37%	0.44%	**0.50%**
Denmark	0.62%	0.66%	0.63%	0.65%	0.57%	0.63%	0.64%	0.63%	0.50%	0.52%	0.53%	**0.49%**
Germany	0.32%	0.33%	0.41%	0.54%	0.63%	0.63%	0.58%	0.56%	0.69%	0.68%	0.81%	**0.40%**
Korea	0.40%	0.50%	0.58%	0.97%	0.70%	0.51%	0.57%	0.28%	0.25%	0.24%	0.24%	**0.37%**
France	0.39%	0.34%	0.33%	0.32%	0.34%	0.36%	0.36%	0.39%	0.53%	0.46%	0.51%	**0.35%**
Switzerland	0.36%	0.36%	0.40%	0.41%	0.42%	0.37%	0.35%	0.36%	0.41%	0.38%	0.48%	**0.34%**
United Kingdom	0.33%	0.41%	0.40%	0.41%	0.49%	0.43%	0.48%	0.52%	0.53%	0.38%	0.45%	**0.33%**
Total	**0.30%**	**0.29%**	**0.28%**	**0.33%**	**0.32%**	**0.29%**	**0.29%**	**0.28%**	**0.29%**	**0.28%**	**0.35%**	**0.29%**

Bilateral Donor Aid US$ Current (OECD DAC CRS)

DonorName	2019	2020	2021	2022	**Total**
EU Institutions	19,130,002,212	24,930,200,496	25,245,170,483	32,032,379,409	**365,902,001,880**
Germany	22,562,838,482	27,391,559,262	30,087,232,424	34,176,100,338	**336,164,371,373**
Japan	14,679,847,722	16,887,069,400	17,808,338,935	19,640,580,899	**321,134,939,346**
France	10,774,495,047	14,053,318,727	13,999,606,350	14,404,707,323	**206,879,190,819**
United Kingdom	14,885,646,264	13,974,094,350	11,890,999,529	13,993,911,637	**204,655,982,624**
Korea	4,604,394,796	4,077,711,497	4,458,337,066	4,023,649,101	**100,654,262,485**
Netherlands	3,440,264,013	3,748,293,802	3,820,123,273	4,367,857,201	**88,475,816,047**
Sweden	3,629,941,718	3,696,490,251	4,043,041,742	3,641,271,737	**70,892,886,043**
Canada	3,392,808,261	3,996,950,526	5,101,633,865	7,334,000,501	**68,727,871,412**
Norway	3,702,741,516	3,525,811,316	3,969,139,110	4,683,489,339	**67,983,854,100**
Australia	2,757,355,099	2,344,673,178	3,080,837,142	2,695,804,136	**58,738,008,115**
Total	**116,088,276,893**	**131,122,542,264**	**139,134,968,916**	**164,136,823,624**	**2,166,171,113,926**

Figure 54. Follow-The-Money Corruption Cycle: US Efficiency Losses

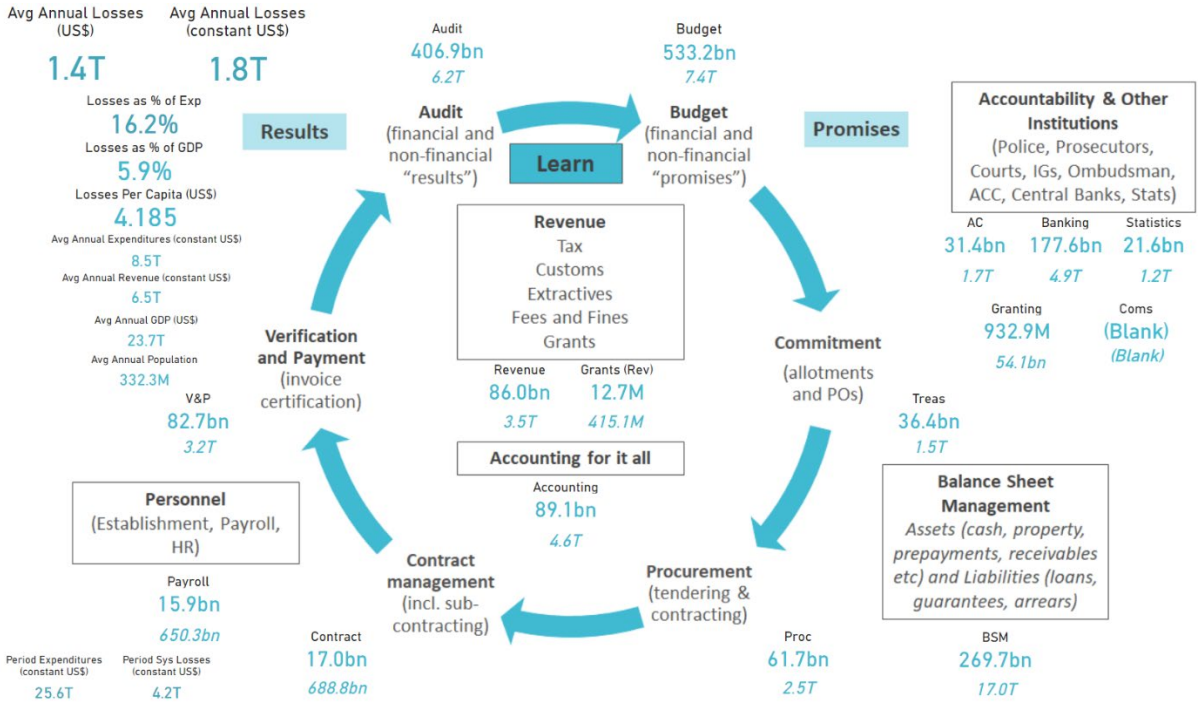


Table 8. League Table of Efficiency Losses G20+5 Group (Central Government)

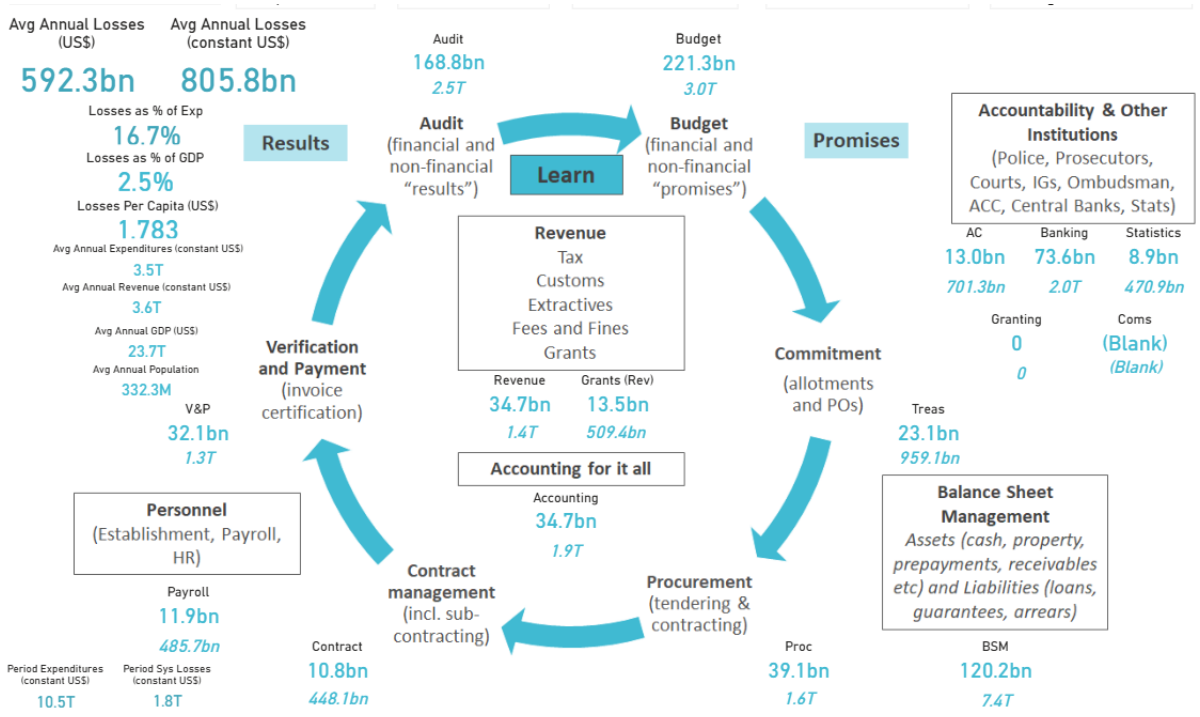
Country	Efficiency Losses (% of Exp) average per Year	Efficiency Losses (% of Rev) average per Year	Efficiency Losses (% GDP) average per Year	Efficiency Losses (p.c.) average per Year
New Zealand	13.82%	15.34%	4.36%	2,021
Germany	14.90%	16.54%	4.26%	2,117
Australia	15.29%	17.88%	4.06%	2,379
Ireland	15.44%	16.51%	3.07%	3,032
United States	15.80%	24.51%	4.04%	2,833
United Kingdom	16.32%	21.01%	6.41%	2,824
Canada	16.52%	20.40%	3.37%	1,660
France	17.57%	20.29%	7.66%	3,159
Singapore	17.70%	19.00%	2.88%	2,106
Korea	18.57%	19.53%	5.12%	1,692
Italy	20.42%	24.72%	8.79%	3,057
Indonesia	23.01%	31.07%	3.35%	145
South Africa	23.80%	28.68%	7.30%	459
Saudi Arabia	25.46%	27.19%	8.32%	2,309
Argentina	26.10%	34.42%	5.42%	591
Brazil	26.76%	33.55%	7.98%	644
Mexico	27.16%	32.60%	5.30%	538
Russia	28.52%	28.21%	8.32%	1,059
Total	**20.18%**	**23.97%**	**5.56%**	**1,813**

Efficiency Losses by Sector of Government

Table 9. Losses by Sector of the US Government (2020-22)

Sector Name Long	Efficiency Losses (Systemic Total) avg per Year	Efficiency Losses (% of Exp) average per Year	Efficiency Losses (% GDP) average per Year
1-General government	1,390,554,496,738	16.16%	5.95%
2-Central government (incl. social security funds)	941,299,826,686	15.80%	4.04%
3-Central government (excl. social security funds)	571,007,570,011	15.31%	2.45%
4-Budgetary central government	571,007,570,011	15.31%	2.45%
6-State governments	592,349,835,022	16.73%	2.52%
8-Social security funds	320,489,609,699	14.88%	1.38%

Figure 55. Follow-The-Money Corruption Cycle: US State Government Losses



Efficiency Losses by Function of Government

Table 10. Losses by Function of the US General Government (2020-22) – US$ Current

General Government Current US$

Item and Code 2011	2020	2021	2022	Total
710-Social protection	440,410,680,233	296,261,204,738	310,558,421,414	**349,076,768,795**
707-Health	386,431,155,620	254,325,462,527	396,266,401,192	**345,674,339,780**
701-General public services	210,825,888,116	136,053,516,556	223,531,227,277	**190,136,877,316**
709-Education	219,272,435,094	137,311,098,165	209,988,653,311	**188,857,395,523**
704-Economic affairs	235,336,604,512	125,642,840,965	142,961,642,933	**167,980,362,803**
702-Defense	127,869,895,590	78,365,085,423	116,169,320,383	**107,468,100,466**
703-Public order and safety	76,524,657,779	48,414,704,323	73,822,749,481	**66,254,037,195**
706-Housing and community amenities	19,017,867,788	18,622,458,486	20,572,333,356	**19,404,219,877**
708-Recreation, culture and religion	10,007,198,767	6,059,039,029	9,181,545,922	**8,415,927,906**
705-Environmental protection	0	0	0	**0**
Total	**1,725,696,383,500**	**1,101,055,410,212**	**1,503,052,295,269**	**1,443,268,029,660**

** COFOG and Economic classification data come from different IMF databases. Coherence issues between the two sources are evident in some countries, including the US.*

Table 11. Losses by Function of the US General Government (2020-22) – US$ Current

General Government % of GDP

Item and Code 2011	2020	2021	2022	Total
710-Social protection	2.06%	1.25%	1.19%	**1.50%**
707-Health	1.81%	1.07%	1.52%	**1.47%**
701-General public services	0.99%	0.57%	0.86%	**0.81%**
709-Education	1.03%	0.58%	0.81%	**0.80%**
704-Economic affairs	1.10%	0.53%	0.55%	**0.73%**
702-Defense	0.60%	0.33%	0.45%	**0.46%**
703-Public order and safety	0.36%	0.20%	0.28%	**0.28%**
706-Housing and community amenities	0.09%	0.08%	0.08%	**0.08%**
708-Recreation, culture and religion	0.05%	0.03%	0.04%	**0.04%**
705-Environmental protection	0.00%	0.00%	0.00%	**0.00%**
Total	**8.08%**	**4.65%**	**5.78%**	**6.17%**

Table 12. Losses by Function of the US State Government (2020-22) – US$ Current

State Government Current US$

Item and Code 2011	2020	2021	2022	Total
709-Education	208,094,060,578	149,917,839,082	198,988,799,765	**185,666,899,808**
707-Health	181,709,978,164	141,129,403,345	195,174,269,095	**172,671,216,868**
704-Economic affairs	99,268,993,859	71,419,786,552	121,216,357,897	**97,301,712,769**
701-General public services	99,178,322,188	71,945,863,343	89,814,135,728	**86,979,440,420**
703-Public order and safety	65,641,481,374	47,781,506,795	63,294,686,834	**58,905,891,667**
710-Social protection	35,269,562,707	26,076,097,036	38,671,402,312	**33,339,020,685**
706-Housing and community amenities	10,578,018,150	8,104,247,779	10,999,403,507	**9,893,889,812**
708-Recreation, culture and religion	9,054,802,770	6,283,268,144	8,316,420,927	**7,884,830,613**
702-Defense	0	0	0	**0**
705-Environmental protection	0	0	0	**0**
Total	**708,795,219,789**	**522,658,012,076**	**726,475,476,064**	**652,642,902,643**

Table 13. Losses by Function of the US State Government (2020-22) - % of GDP

State Government % of GDP

Item and Code 2011	2020	2021	2022	Total
709-Education	0.97%	0.63%	0.77%	**0.79%**
707-Health	0.85%	0.60%	0.75%	**0.73%**
704-Economic affairs	0.46%	0.30%	0.47%	**0.41%**
701-General public services	0.46%	0.30%	0.35%	**0.37%**
703-Public order and safety	0.31%	0.20%	0.24%	**0.25%**
710-Social protection	0.17%	0.11%	0.15%	**0.14%**
706-Housing and community amenities	0.05%	0.03%	0.04%	**0.04%**
708-Recreation, culture and religion	0.04%	0.03%	0.03%	**0.03%**
702-Defense	0.00%	0.00%	0.00%	**0.00%**
705-Environmental protection	0.00%	0.00%	0.00%	**0.00%**
Total	**3.32%**	**2.21%**	**2.79%**	**2.77%**

Figure 56. FTM Cycle: US Social Protection Efficiency Losses

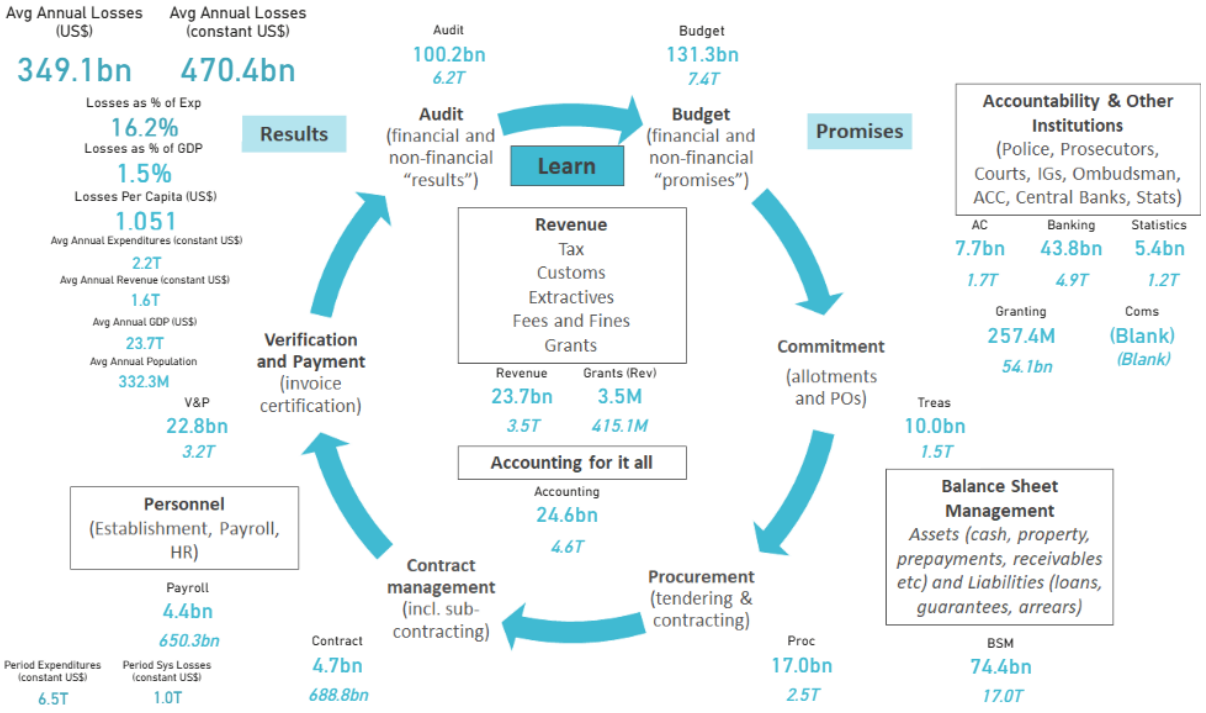


Figure 57. FTM Cycle: US Defense Efficiency Losses

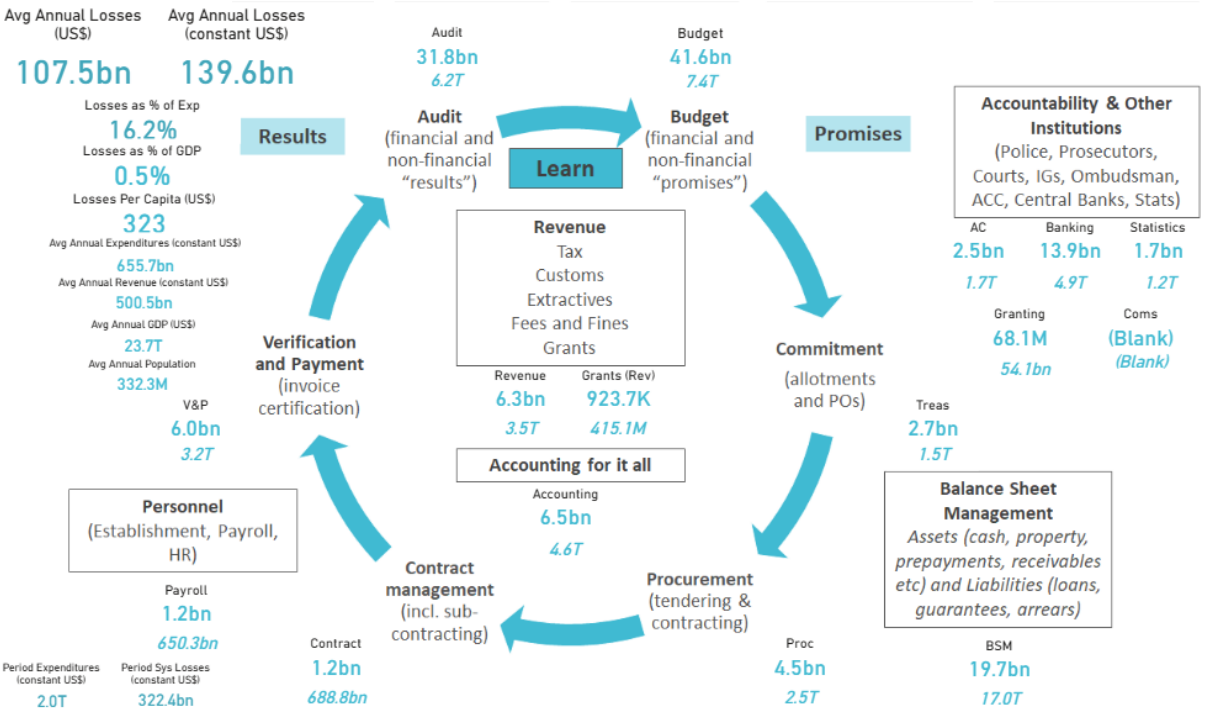


Figure 58. FTM Cycle: US Public Order and Safety Efficiency Losses

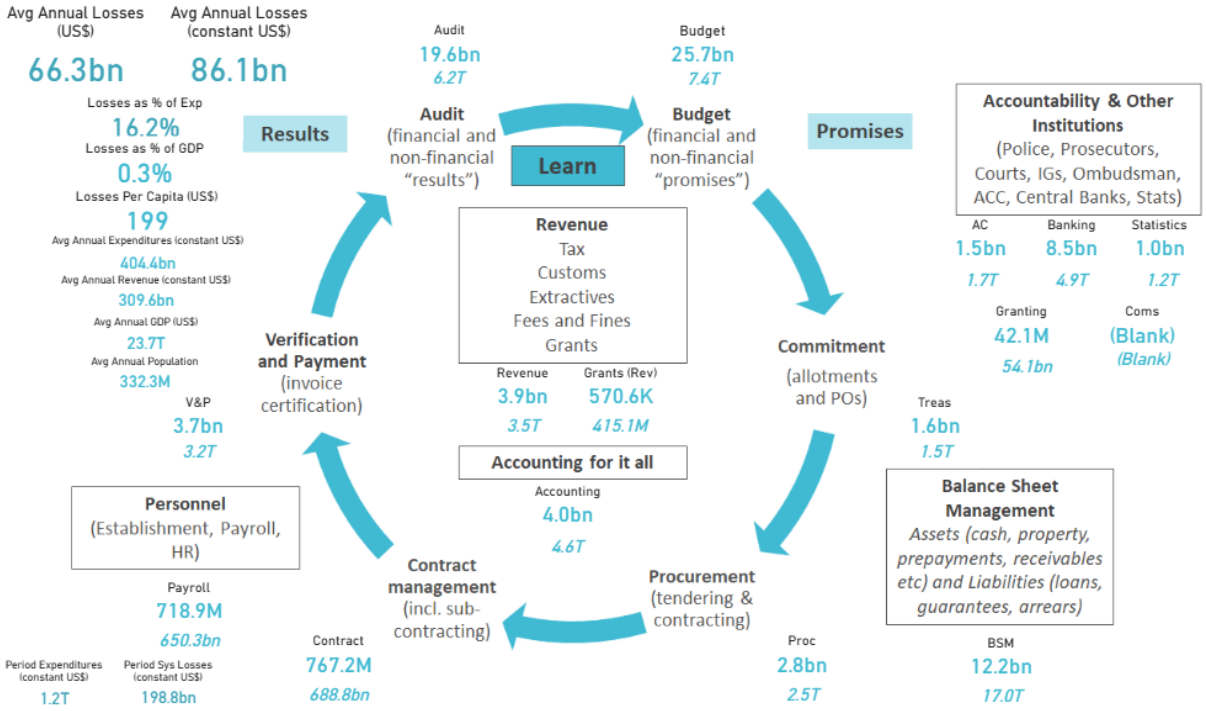


Figure 59. FTM Cycle: US Education Efficiency Losses

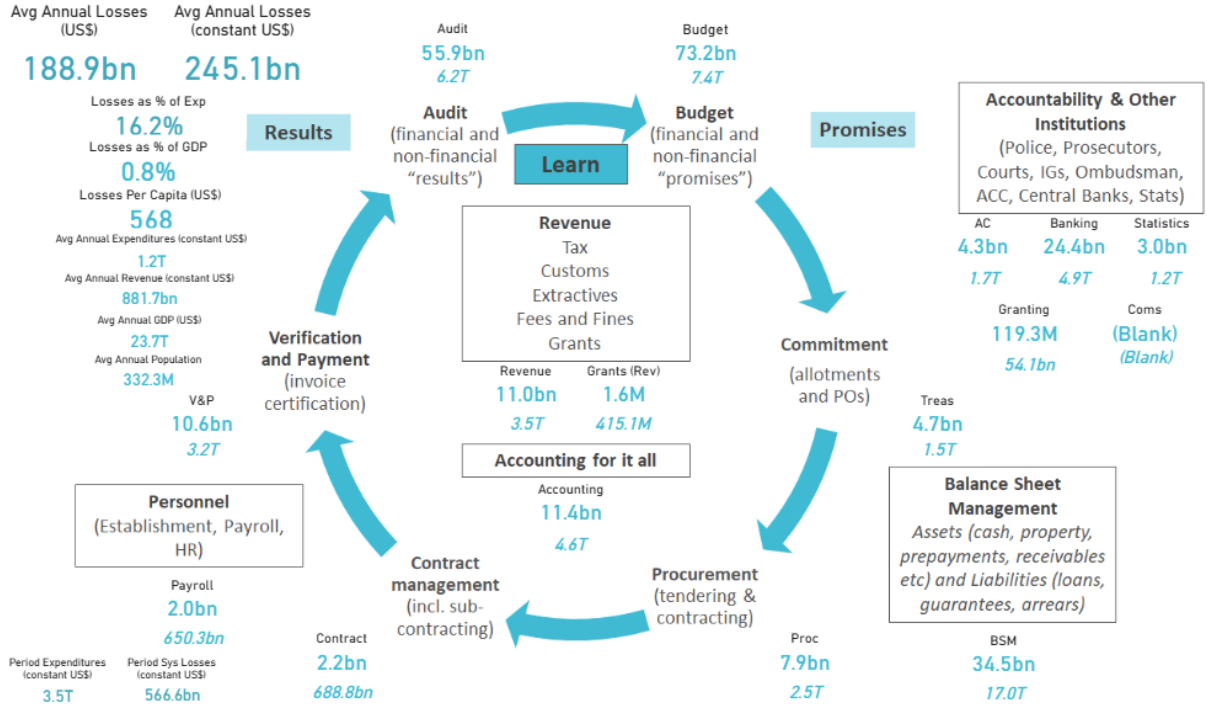


Figure 60. FTM Cycle: US Health Efficiency Losses

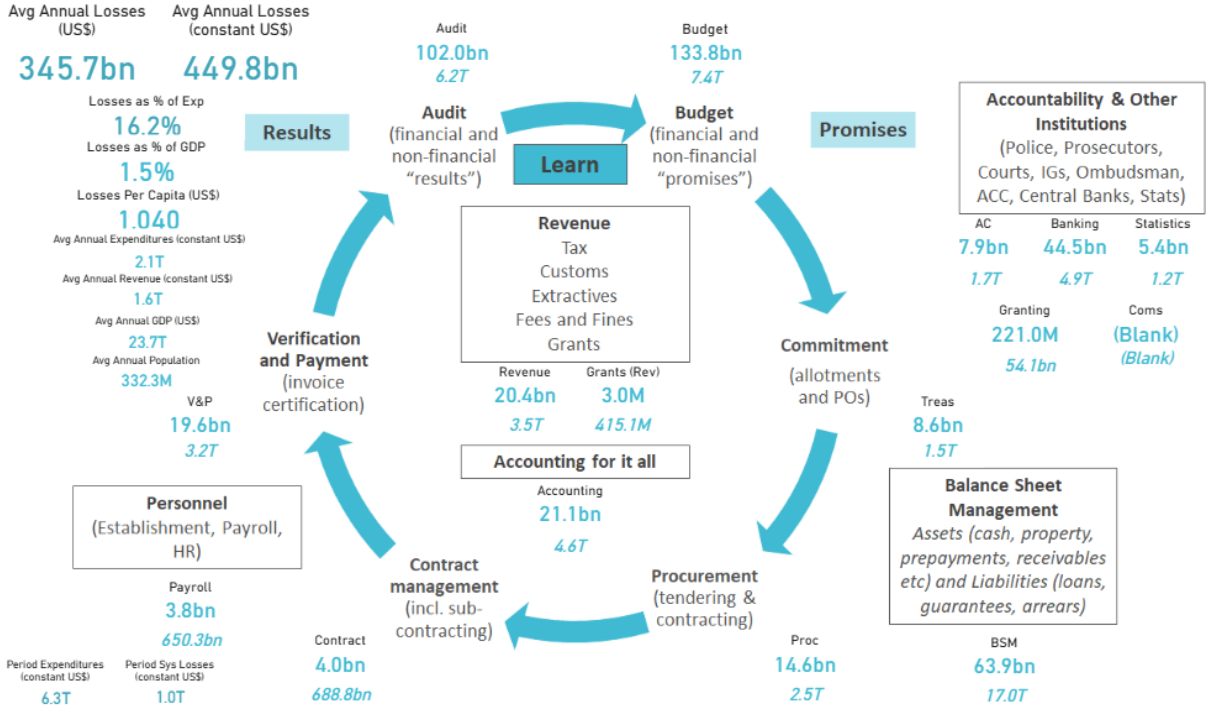


Figure 61. Follow-The-Money Corruption Cycle: Systemic Risks

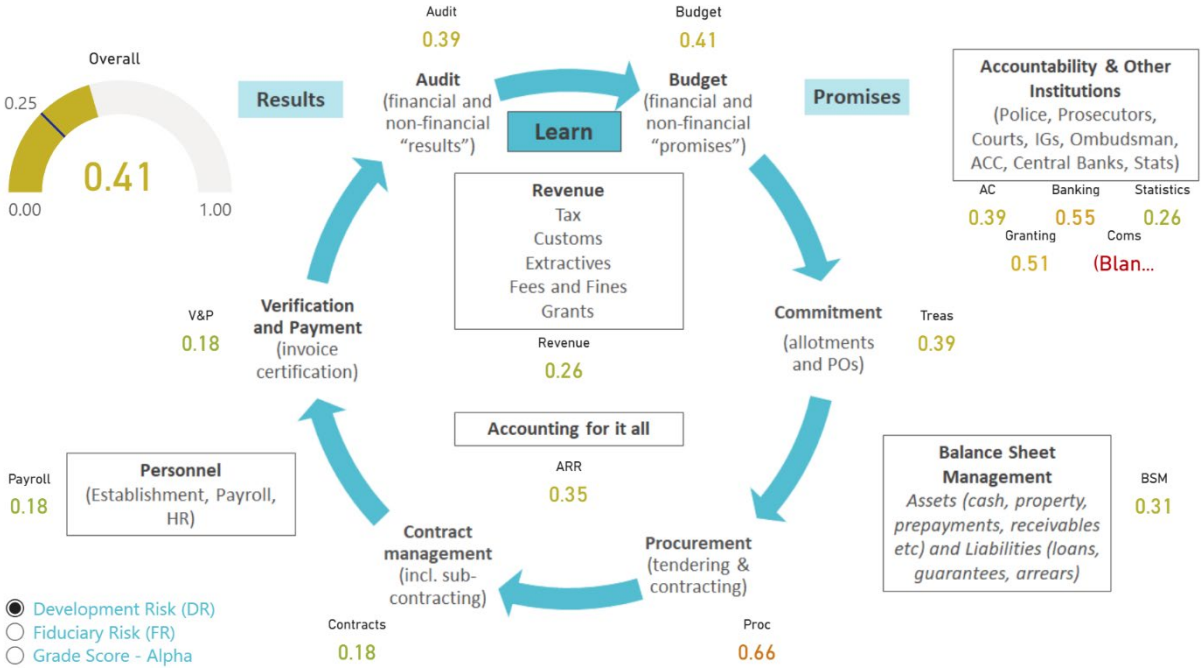


Figure 62. Risks Drivers: AML Risks: Region, Religion, Income

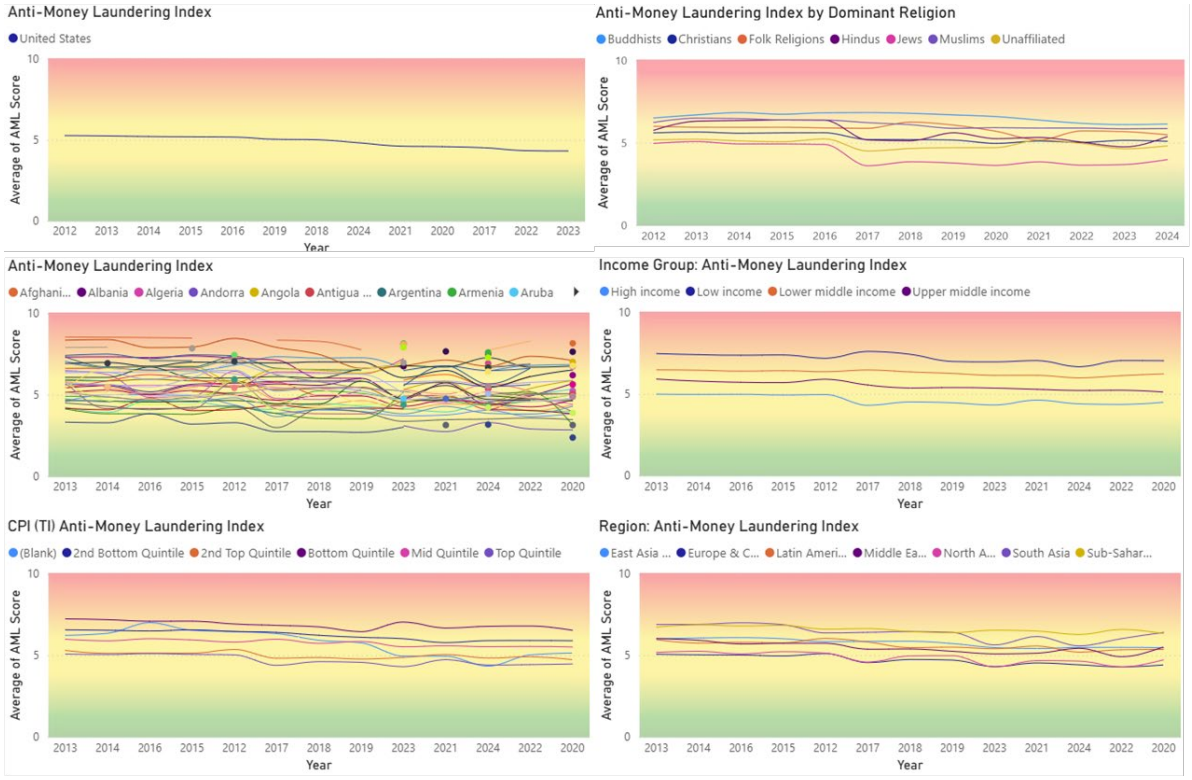


Figure 63. Top Anti-Money Laundering (AML) Scores by Country

Country	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Total
Andorra									2.83	2.73	2.89	3.09	3.29	**2.97**
Estonia	3.28	3.31	3.27	3.19	3.82	2.73	2.73	2.68	2.36			3.00	3.16	**3.05**
Cook Islands									3.13	3.13				**3.13**
Finland	3.59	3.74	2.51	2.53	3.05	1.78	2.57	3.17	2.97	5.71	2.88	2.96	3.07	**3.30**
Slovenia	3.37	3.30	3.38	3.41	4.06	2.78	3.75	3.70	3.35	3.30	3.37	3.57	3.54	**3.45**
New Zealand	3.82	4.01	3.83	3.78	3.86	3.03	3.20	3.18	3.24	3.53	3.32	3.38	3.68	**3.53**
Lithuania	3.96	3.81	3.64	3.67	3.62	3.67	3.12	3.55	3.51	3.51	3.43	3.47	3.54	**3.58**
Norway	2.36	3.17	4.03	4.60	4.63	3.80	4.12	3.91	3.19	3.35	3.50	3.45	3.76	**3.68**
Denmark	4.30	4.49	4.29	4.23	4.08	2.98	4.11	3.95	3.46	3.46	3.56	3.36	3.50	**3.83**
Iceland	4.18	4.28	4.29	4.24	4.47	3.52	4.59	4.66	4.25	4.16	3.31	2.87	3.00	**3.99**
Bulgaria	4.24	4.13	3.83	3.79	3.83	3.84	3.53	3.51	3.12		5.16	5.16	4.99	**4.09**
Portugal	4.28	4.30	4.17	4.12	4.21	3.95	4.66	4.10	3.66	3.85	4.00	4.08	4.09	**4.11**
Taiwan										4.39	4.08	4.00	4.05	**4.13**

Figure 64. Risks Drivers: Corruption Perceptions Index (CPI) Scores: Region, Religion, Income

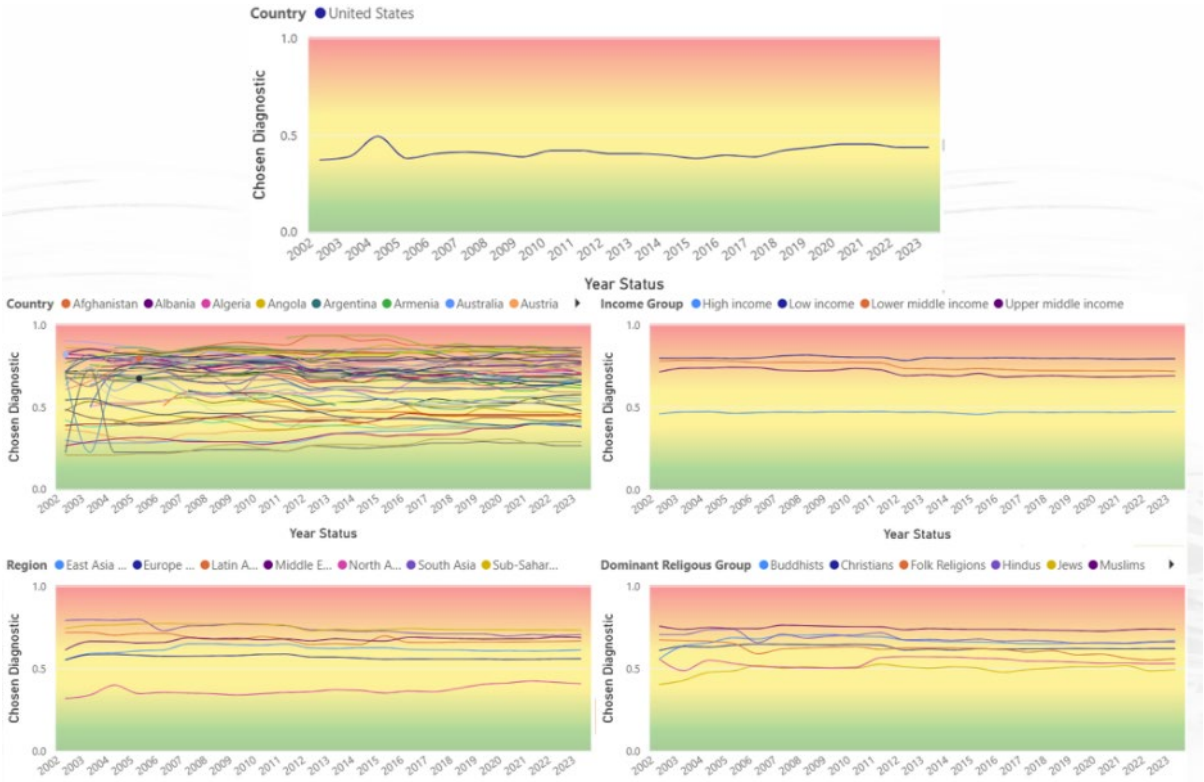


Figure 65. Risks Drivers: Open Budget Index (OBI) Scores: Resources, Region, Religion, Income

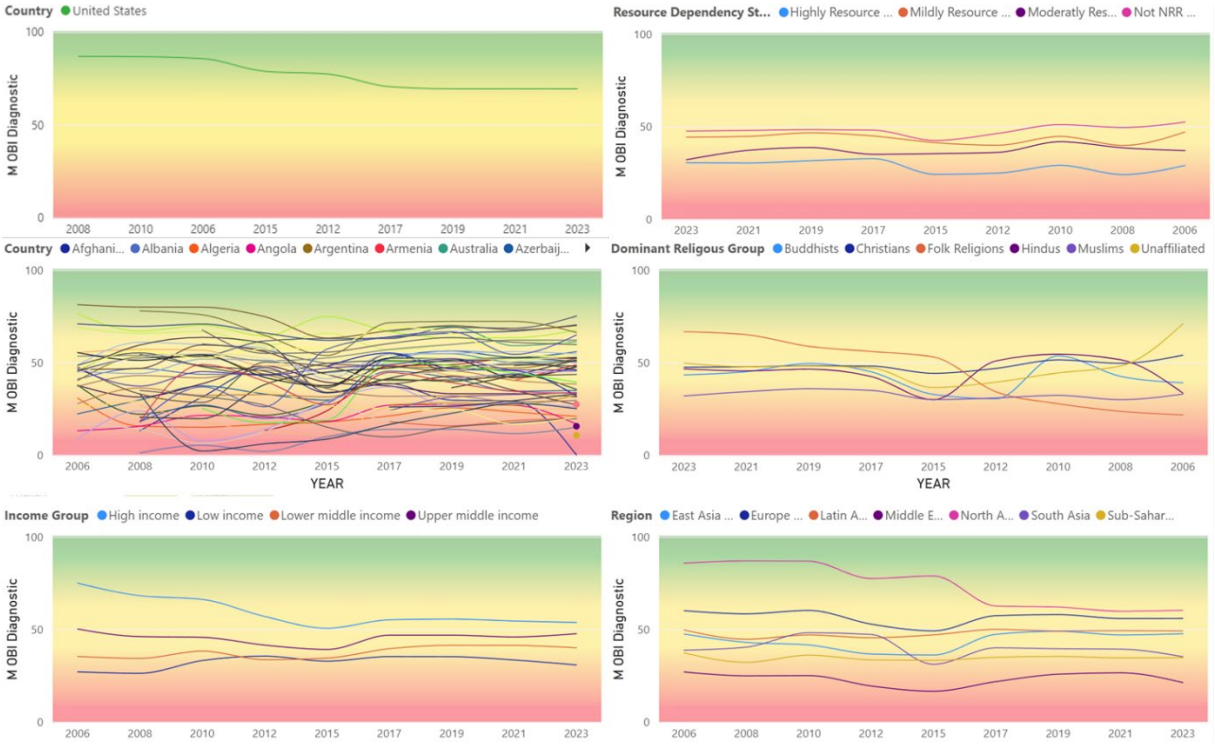


Table 14. Risks Drivers: Open Budget Index (OBI) Scores: Top Performing Countries

Country	2006	2008	2010	2012	2015	2017	2019	2021	2023	Total
Norway	77.88	84.73	87.45	78.48	84.23	71.99	71.06	71.53	71.53	**77.65**
United States	85.71	86.97	86.79	77.40	78.84	70.58	69.44	69.44	69.44	**77.18**
South Africa	84.44	81.23	88.89	81.45	76.75	71.73	70.60	68.03	68.72	**76.87**
New Zealand	80.07	80.47	81.52	79.34	61.24	74.51	76.82	73.58	73.54	**75.68**
Sweden	77.32	76.47	82.72	78.69	68.40	69.24	72.03	68.77	67.36	**73.45**
France	81.27	79.93	79.91	74.74	63.15	67.15	69.93	67.60	69.92	**72.62**
Slovenia	81.39	80.56	78.56	73.45	63.72	62.97	64.15	65.99	61.37	**70.24**
Germany		77.88	75.75	64.69	53.73	71.52	72.21	72.21	66.16	**69.27**
United Kingdom	72.53	76.33	75.96	73.86	58.09	64.81	72.67	67.58	60.63	**69.16**
Brazil	76.25	66.88	70.10	64.29	74.79	66.67	63.18	63.38	67.34	**68.10**
Poland	78.45	73.09	71.82	56.58	53.04	68.76	69.91	68.34	66.44	**67.38**

Figure 66. Risks Drivers: PEFA Estimates for US and Comparators

Country	2018	2021	Average
United States	0.32	0.34	0.33



Region	FR Average
Sub-Saharan Africa	0.54
East Asia & Pacific	0.49
South Asia	0.49
Middle East & North Africa	0.47
Latin America & Caribbean	0.45
Europe & Central Asia	0.40
North America	0.33
Avg of Weighted PIs	**0.48**

2024 BTI Democracy Status	FR Average
Moderate autocracies	0.53
Unrated	0.52
Hard-line autocracies	0.50
Democracies in consolidation	0.48
Defective democracies	0.46
Highly defective democracies	0.46
Effective democracies - Unrated	0.43
Avg of Weighted PIs	**0.48**

2024 BTI Level of Difficulty	FR Average
Substantial	0.54
Massive	0.53
Unrated	0.52
Moderate	0.46
Negligible	0.44
Minor	0.44
Negligible - Unrated	0.43
Avg of Weighted PIs	**0.48**

Dominant Religous Group	FR Average
No Dominant Group	0.63
Hindus	0.52
Muslims	0.50
Buddhists	0.47
Christians	0.46
Folk Religions	0.43
Avg of Weighted PIs	**0.48**

Income Group	FR Average
Low income	0.52
Lower middle income	0.50
Upper middle income	0.44
High income	0.41
Avg of Weighted PIs	**0.48**

Fragile State 22 Top 60	FR Average
FSI 2022 Top 60	0.54
FSI 2022 Top 30	0.53
FSI 2022 Top 10	0.51
Not Fragile (>60)	0.44
Avg of Weighted PIs	**0.48**

Government System	FR Average
Presidential	0.49
Parliamentary	0.47
	0.47
Semi_Presidential	0.47
Other	0.47
Avg of Weighted PIs	**0.48**

Diversity Quintile	FR Average
	0.44
2nd Highset Quintile	0.46
2nd Lowest Quintile	0.43
Highset Quintile	0.52
Lowest Quintile	0.47
Mid Quintile	0.47
Avg of Weighted PIs	**0.48**

Table 15. Risks Drivers: Budget to Actuals (B2A)

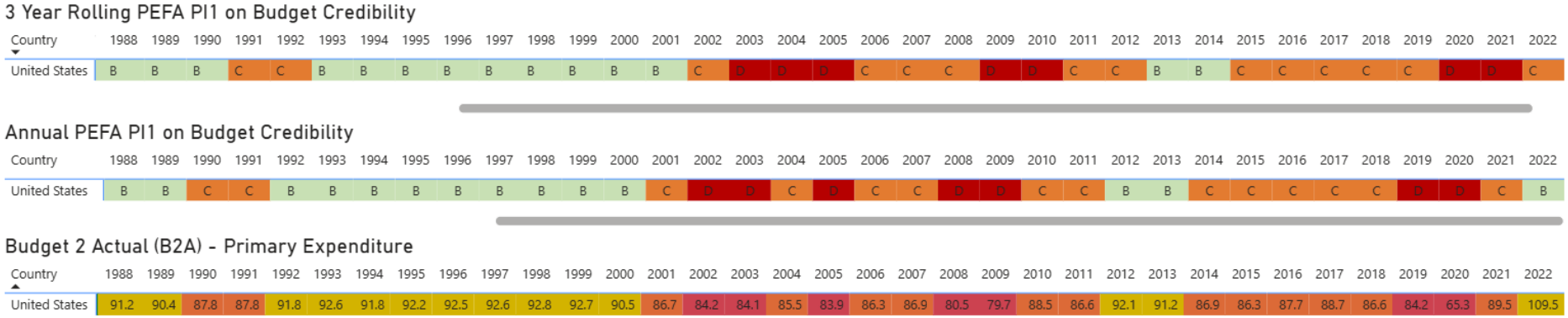


Table 16. Risks Drivers: PEFA Budget Reliability Performance Indicators (B2A)

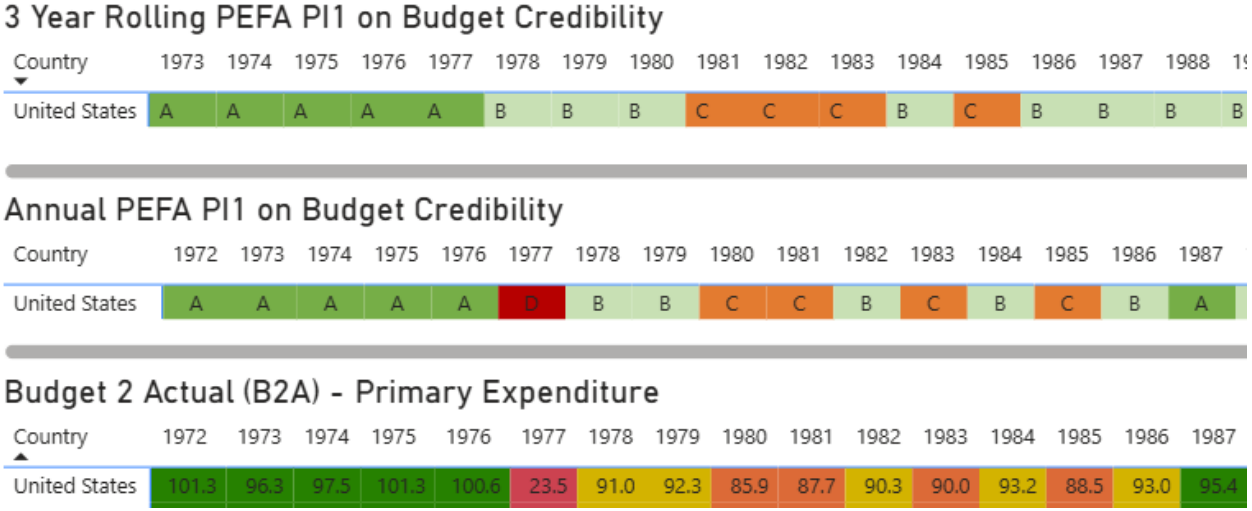


Figure 67. Risks Drivers: Rule of Law Index (RoLI)

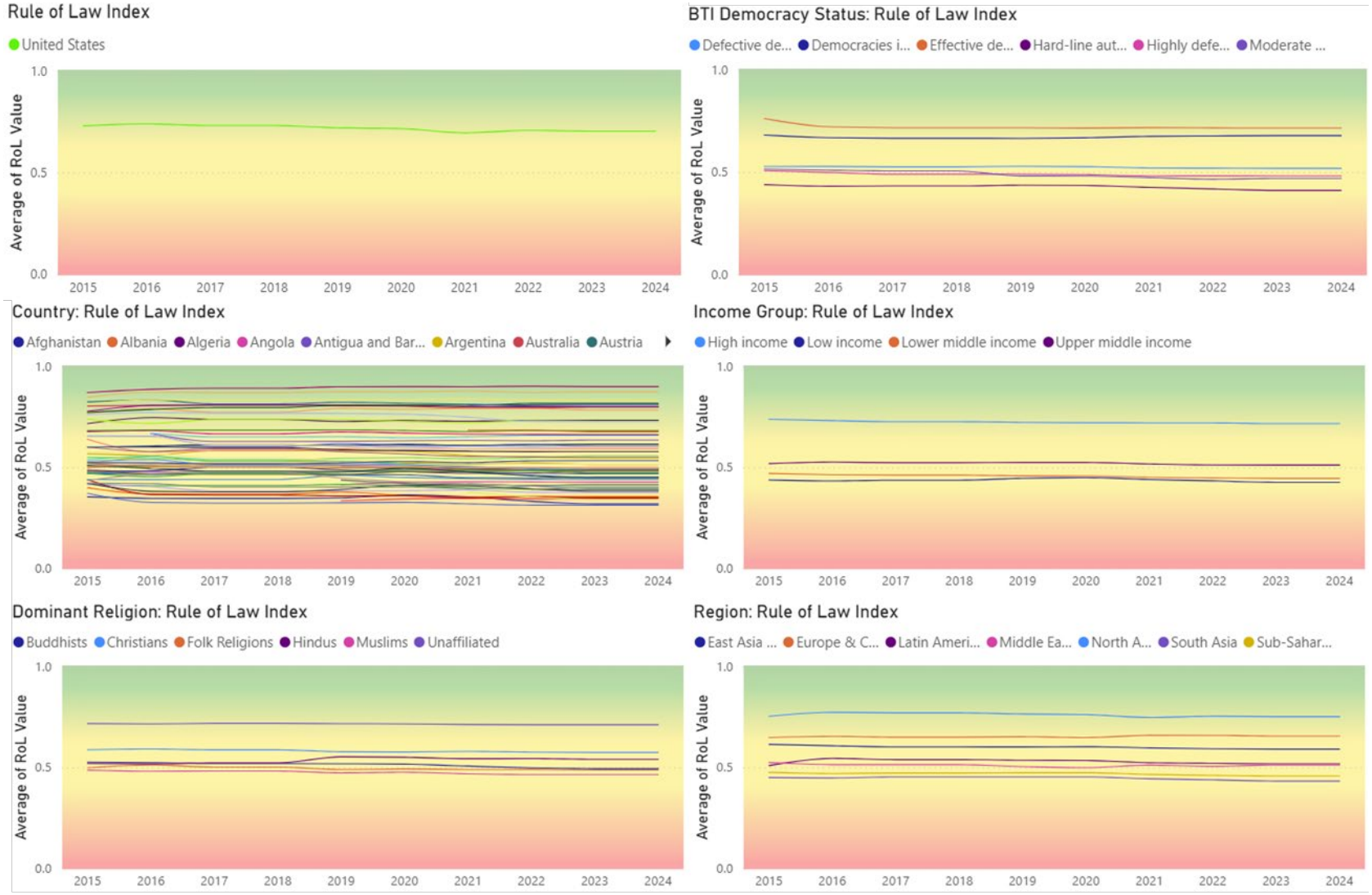
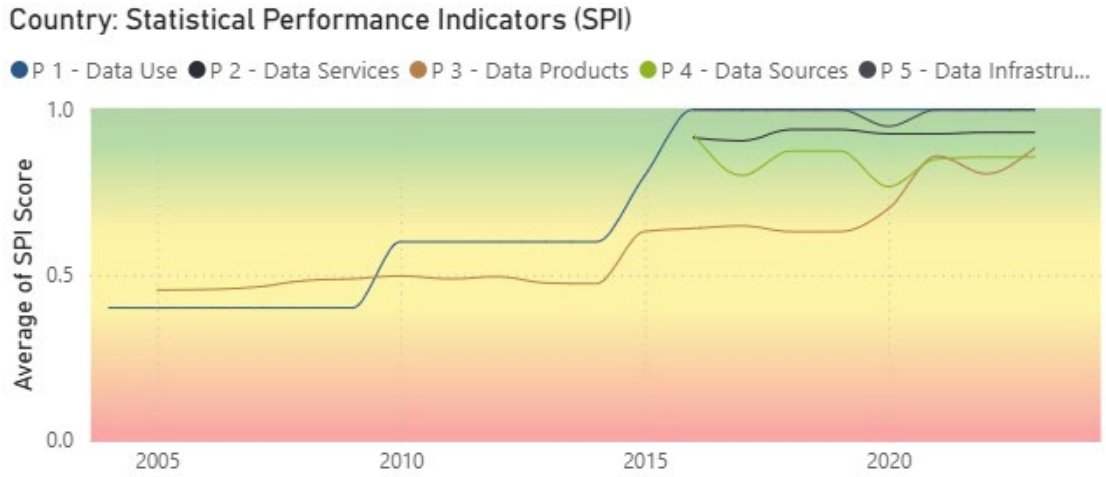


Figure 68. Risks Drivers: Statistical Performance Indicators (SPI) – USA Pillars



SPI was found to have various relationships with other metrics.

- CPI, Resource Dependency, region and Income group are all closely associated with SPI (see Figure 68 and Figure 69).
- BTI categories are closely associated with SPI including democracy status (e.g. defective or hard-line autocracy), age of democracy, and difficulty (see Figure 70). This implies that statistical performance is better the more democratic the country, the older the democracy and the easier it is to govern.
- Diversity (fractionalization of race, religion and language) points away from a goldilocks theory, with lowest diversity doing best in statistical capacity (see Figure 70). Most diverse countries consistently do worse under SPI, while the least diverse countries consistently do better.
- Fragility, legal traditions and political regulation and religions are also associated with SPI results. Fragility is negatively associated with SPI, while political regulation is positively and closely associated with SPI. Scandinavian and German legal traditions have outlier positive performance under SPIs. Jews and Folk Religions also have highest SPIs, while no dominant and Muslims have lowest SPIs. (See Figure 71.)

Figure 69. Risks Drivers: Statistical Performance Indicators (SPI): Country, Region, Income Group and CPI

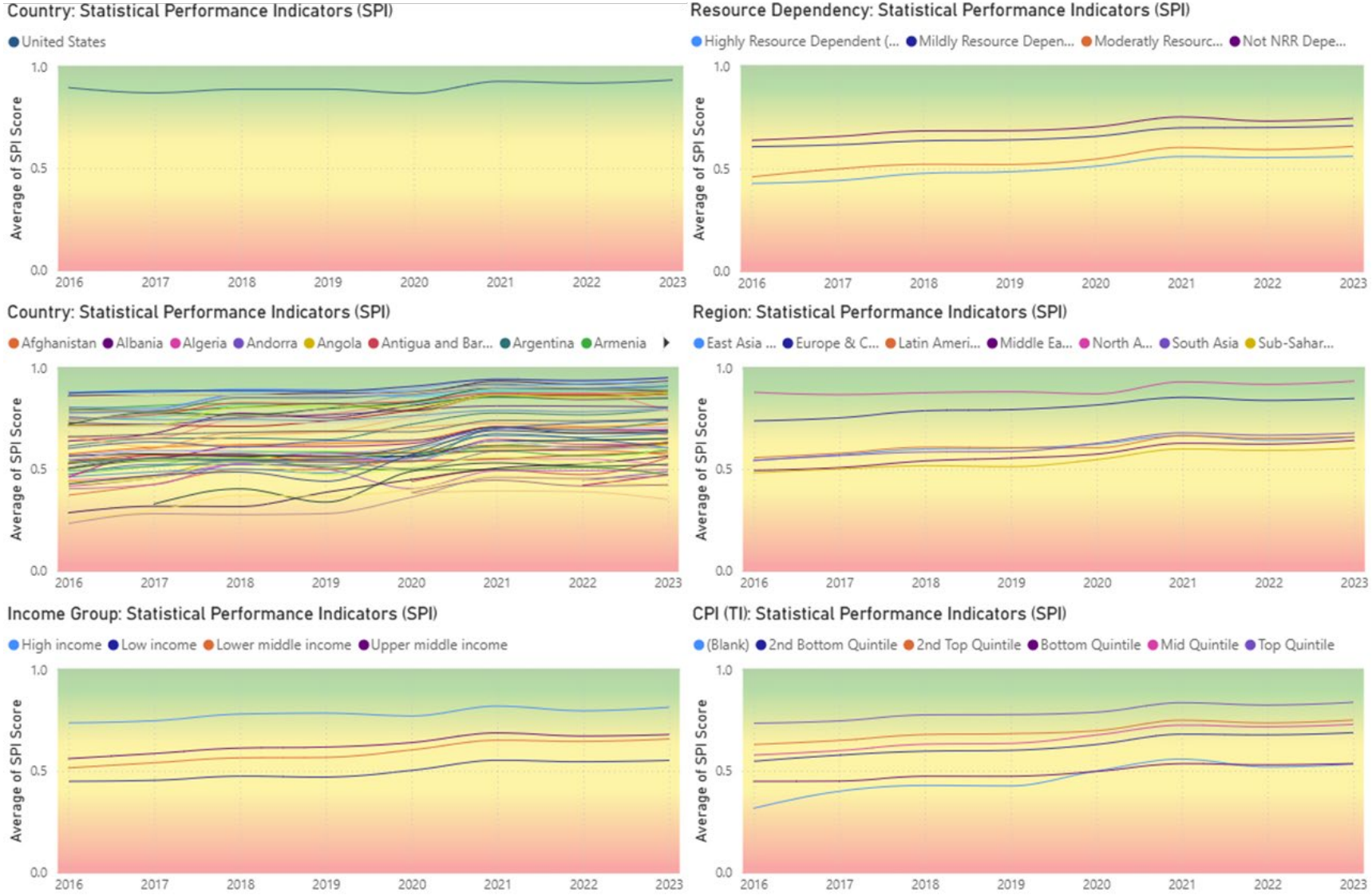


Figure 70. Risks Drivers: Statistical Performance Indicators (SPI): BTI, Democracy Age and Diversity

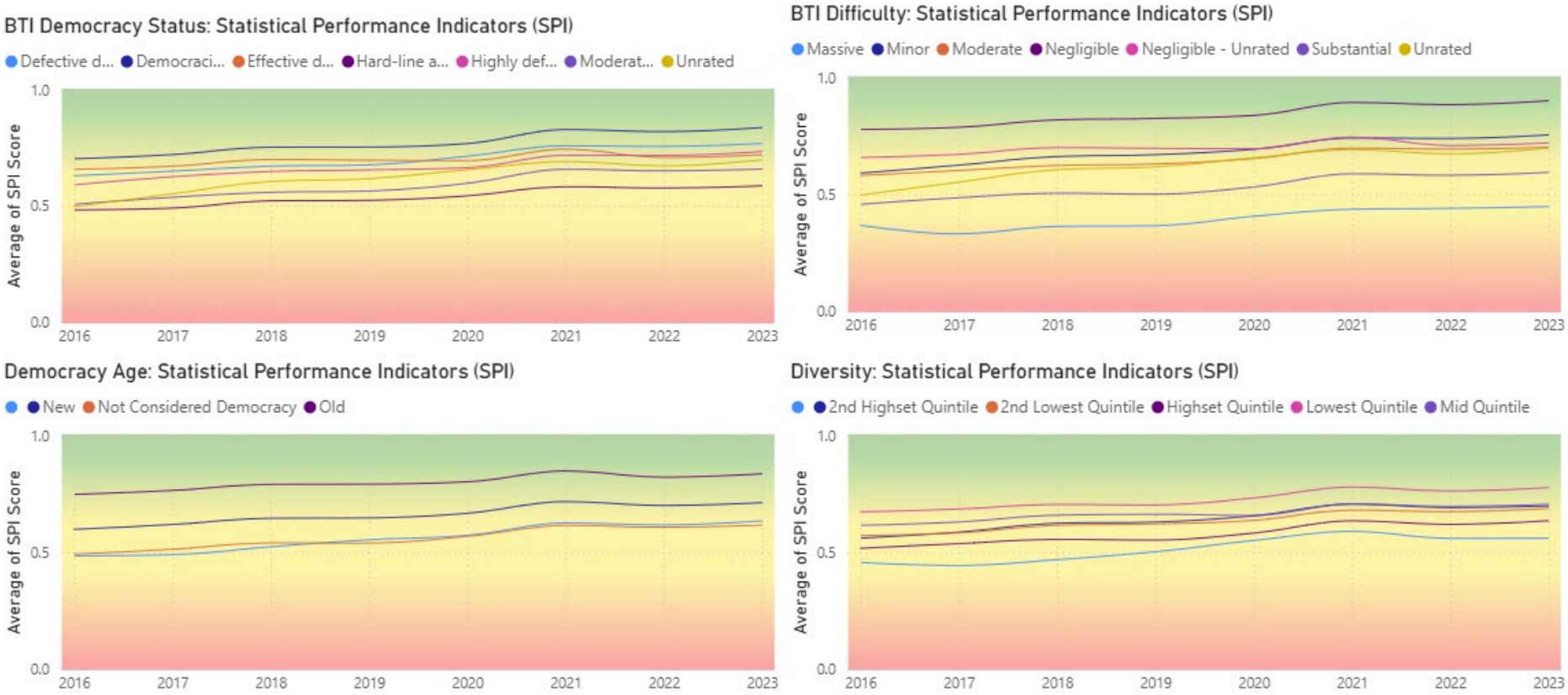


Figure 71. Risks Drivers: Statistical Performance Indicators (SPI): Fragility, RoPFI, Legal Tradition and Religion

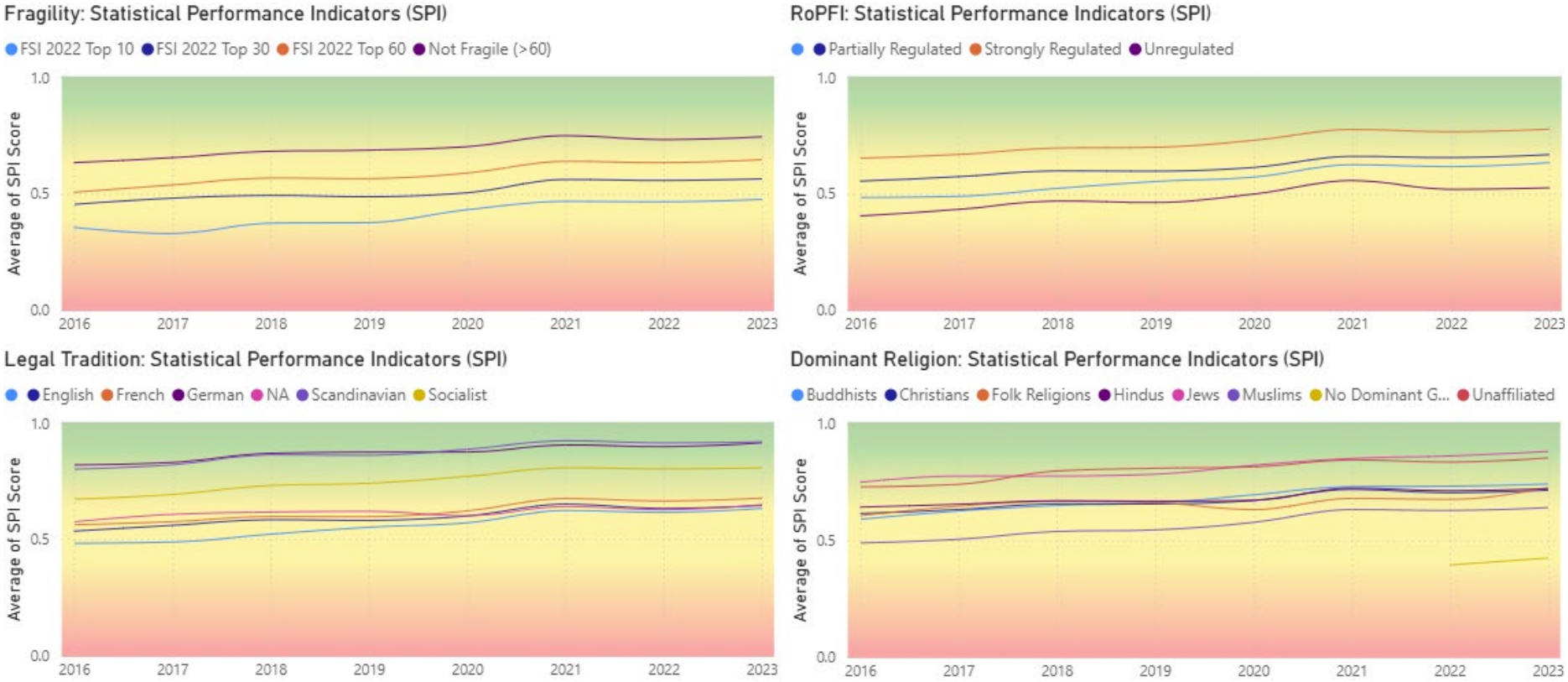
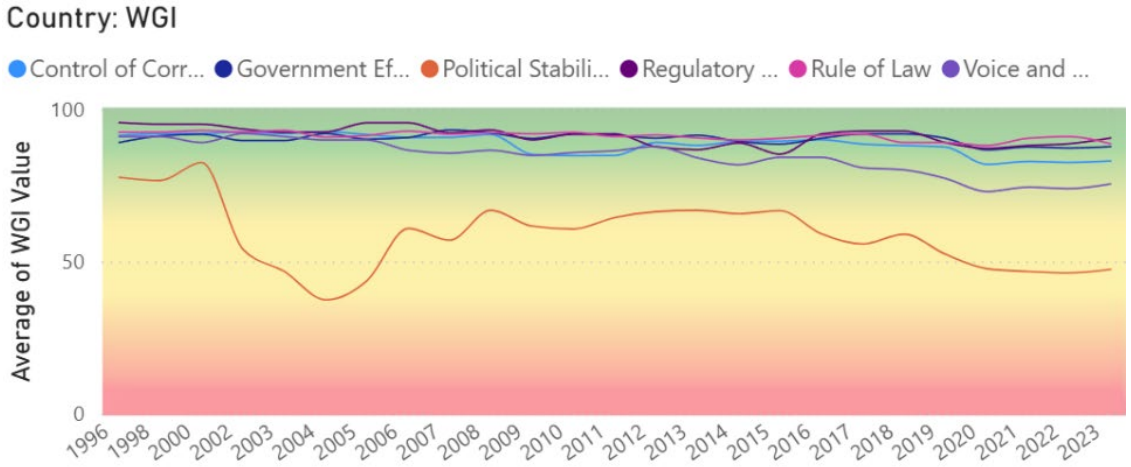


Figure 72. Risks Drivers: Worldwide Governance Indicators: The 6 Themes



Relationships between BTI and other metrices were explored:

- BTI and diversity are correlated with WDI performance. Democracy Status and Age, Difficulty all closely associated with WGI. Diversity results support the goldilocks theory with lowest and mid quintile diversity doing best. (See Figure 74).
- Other relationships with WDI are also apparent. Fragility is also closely associated with WGI, and political regulation less so. Scandinavian and German legal traditions have highest WGIs. While there are mixed results for religions, Muslims and Buddhists have lowest results under WGI. (See Figure 75).

Figure 73. Risks Drivers: Worldwide Governance Indicators: Resource Dependency, Country, Region Income Group and CPI

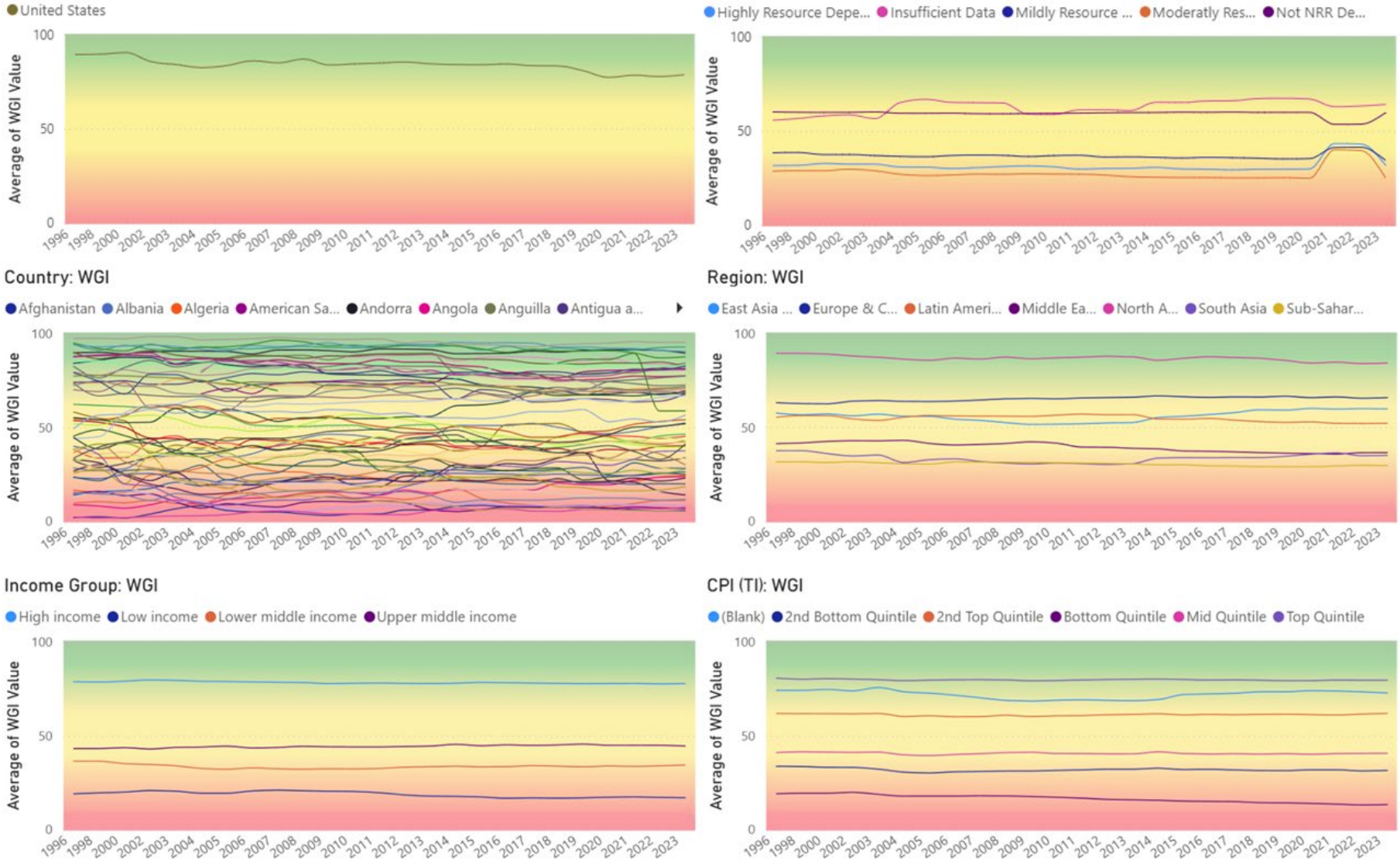


Figure 74. Risks Drivers: Worldwide Governance Indicators: BTI and Diversity

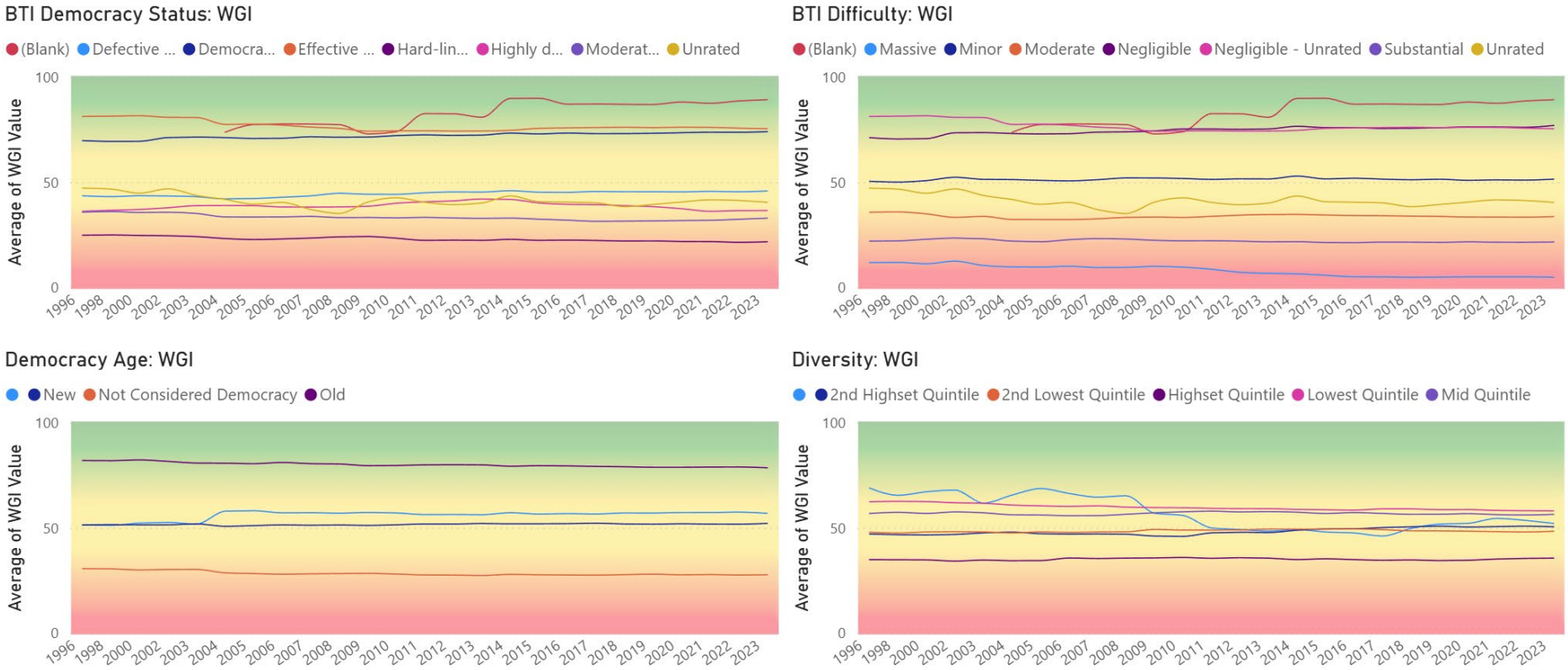


Figure 75. Risks Drivers: Worldwide Governance Indicators: Fragility, RoPFI, Legal Tradition and Religion

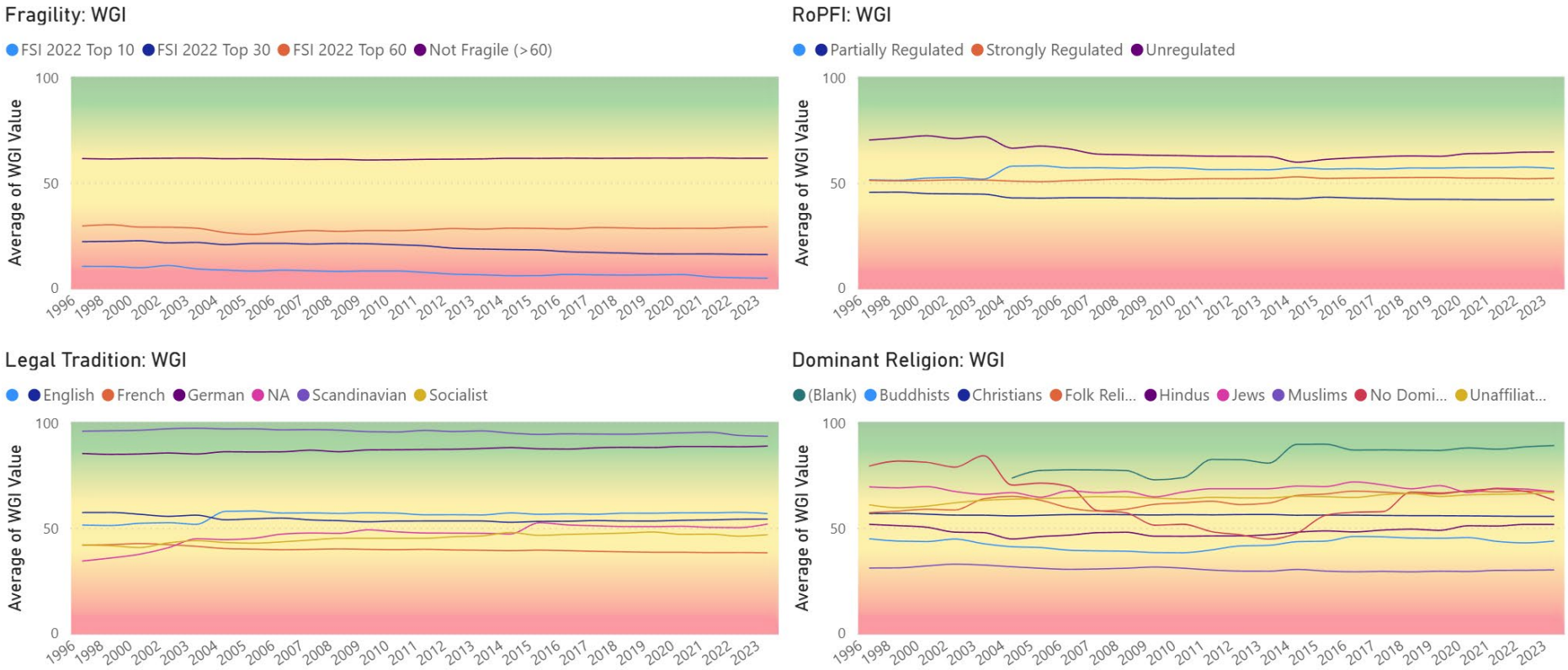


Figure 76. Risks Drivers: Sovereign Risk Rating for the US: Fitch, Moody's S&P and Scope

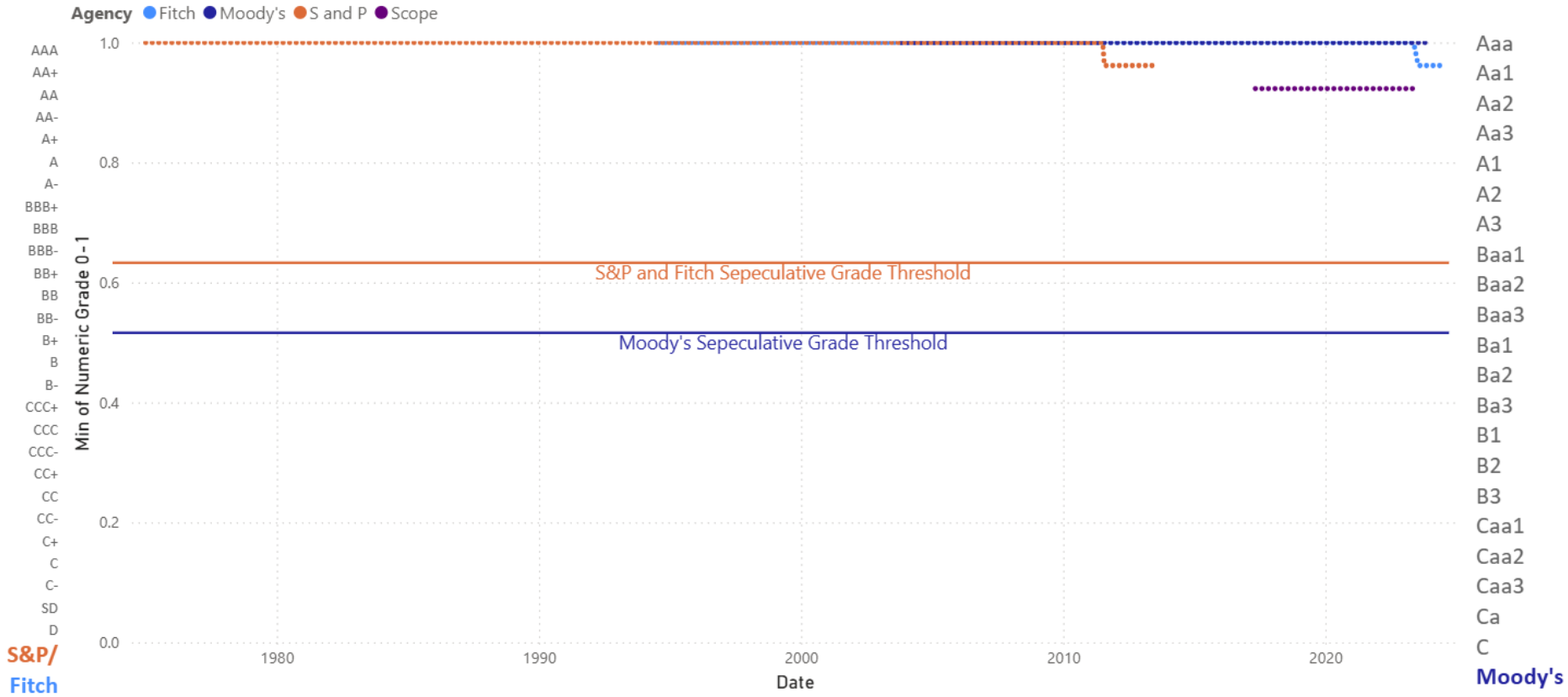


Figure 77. Risks Drivers: Sovereign Risk Rating for the US: Fitch, Moody's S&P and Scope



Main aggregates

Table 17. IMF Database: Reporting by Sectors of the US General Government

Year_Gregorian	1-General government	2-Central government (incl. social security funds)	3-Central government (excl. social security funds)	4-Budgetary central government	6-State governments	7-Local governments	8-Social security funds
1972		113,010,000,000					
1973		118,660,000,000					
1974		127,490,000,000					
1975		141,490,000,000					
1976		146,990,000,000					
1977		165,690,000,000					
1978		182,310,000,000					
1979		206,400,000,000					
1980	543,810,000,000	246,440,000,000			108,430,000,000	188,940,000,000	
1981	621,450,000,000	294,040,000,000			121,770,000,000	205,640,000,000	
1982	690,190,000,000	338,150,000,000			127,020,000,000	225,020,000,000	
1983	757,670,000,000	378,030,000,000			136,340,000,000	243,300,000,000	
1984	820,000,000,000	410,770,000,000			148,190,000,000	261,040,000,000	
1985	918,000,000,000	466,480,000,000			167,020,000,000	284,500,000,000	
1986	980,230,000,000	521,340,000,000			181,460,000,000	310,530,000,000	
1987	1,031,120,000,000	534,240,000,000			195,340,000,000	338,910,000,000	
1988	1,098,570,000,000	558,860,000,000			209,670,000,000	361,630,000,000	
1989	1,175,130,000,000	592,530,000,000	845,340,000,000	845,340,000,000	225,050,000,000	391,960,000,000	349,960,000,000
1990	1,250,780,000,000	1,302,940,000,000	928,250,000,000	928,250,000,000	246,360,000,000	430,630,000,000	374,690,000,000
1991	1,356,380,000,000	1,427,090,000,000	1,017,720,000,000	1,017,720,000,000	265,130,000,000	464,880,000,000	409,370,000,000
1992	1,387,760,000,000	1,442,640,000,000	988,830,000,000	988,830,000,000	278,270,000,000	486,760,000,000	453,810,000,000
1993	1,410,280,000,000	1,492,030,000,000	1,020,170,000,000	1,020,170,000,000	293,060,000,000	512,080,000,000	471,860,000,000
1994	1,451,600,000,000	1,535,550,000,000	1,031,670,000,000	1,031,670,000,000	306,690,000,000	539,520,000,000	503,880,000,000
1995	1,504,630,000,000	1,585,830,000,000	1,051,800,000,000	1,051,800,000,000	328,730,000,000	566,130,000,000	534,030,000,000
1996	1,565,910,000,000	1,638,630,000,000	1,071,950,000,000	1,071,950,000,000	335,210,000,000	600,160,000,000	566,680,000,000
1997	1,617,770,000,000	1,685,180,000,000	1,092,630,000,000	1,092,630,000,000	348,490,000,000	632,520,000,000	592,550,000,000
1998	1,687,400,000,000	1,724,460,000,000	1,117,760,000,000	1,117,760,000,000	370,770,000,000	673,770,000,000	606,700,000,000
1999	1,767,730,000,000	1,781,820,000,000	1,166,330,000,000	1,166,330,000,000	393,520,000,000	722,020,000,000	615,490,000,000
2000	1,919,350,000,000	1,879,830,000,000	1,240,850,000,000	1,240,850,000,000	741,660,000,000	801,800,000,000	638,980,000,000
2001	3,614,821,000,000	2,063,481,500,000	1,290,563,400,000	1,290,563,400,000	1,832,107,100,000		795,657,900,000
2002	3,850,317,700,000	2,211,376,500,000	1,372,940,700,000	1,372,940,700,000	1,946,815,600,000		864,806,600,000
2003	4,095,438,200,000	2,390,002,000,000	1,513,443,200,000	1,513,443,200,000	2,041,404,300,000		908,255,700,000
2004	4,315,239,600,000	2,525,875,600,000	1,612,140,400,000	1,612,140,400,000	2,132,356,400,000		949,853,400,000
2005	4,615,528,300,000	2,734,388,600,000	1,766,386,200,000	1,766,386,200,000	2,237,935,000,000		1,004,147,500,000
2006	4,847,811,400,000	2,865,653,100,000	1,795,489,800,000	1,795,489,800,000	2,342,270,900,000		1,103,732,100,000
2007	5,172,848,900,000	3,054,467,800,000	1,917,227,300,000	1,917,227,300,000	2,499,978,100,000		1,169,042,300,000
2008	5,612,661,700,000	3,391,496,400,000	2,167,887,000,000	2,167,887,000,000	2,618,926,900,000		1,254,642,300,000
2009	5,999,364,000,000	3,744,495,100,000	2,343,899,100,000	2,343,899,100,000	2,746,459,400,000		1,430,536,100,000
2010	6,211,474,200,000	3,973,332,800,000	2,516,936,800,000	2,516,936,800,000	2,786,744,300,000		1,485,114,100,000
2011	6,265,180,500,000	3,990,668,400,000	2,518,121,800,000	2,518,121,800,000	2,788,335,100,000		1,500,234,600,000
2012	6,241,739,200,000	3,910,317,300,000	2,391,642,600,000	2,391,642,600,000	2,815,423,500,000		1,545,660,200,000
2013	6,267,721,700,000	3,865,134,700,000	2,312,860,100,000	2,312,860,100,000	2,891,940,700,000		1,579,379,000,000
2014	6,432,708,400,000	3,973,612,000,000	2,381,464,900,000	2,381,464,900,000	2,991,489,700,000		1,620,459,200,000
2015	6,612,687,100,000	4,060,970,300,000	2,395,169,700,000	2,395,169,700,000	3,120,757,900,000		1,694,247,000,000
2016	6,843,748,200,000	4,207,674,000,000	2,491,688,700,000	2,491,688,700,000	3,231,607,800,000		1,744,451,700,000
2017	7,080,396,700,000	4,345,607,000,000	2,570,024,000,000	2,570,024,000,000	3,333,974,600,000		1,803,575,400,000
2018	7,449,970,400,000	4,598,521,500,000	2,733,411,200,000	2,733,411,200,000	3,473,136,600,000		99,875,800,000
2019	7,881,217,600,000	4,880,123,400,000	2,895,500,300,000	2,895,500,300,000	3,651,169,000,000		2,013,093,700,000
2020	9,707,756,500,000	6,848,873,900,000	4,270,230,600,000	4,270,230,600,000	3,784,954,900,000		2,607,848,000,000
2021	10,308,108,500,000	7,452,668,800,000	4,991,012,000,000	4,991,012,000,000	4,008,572,800,000		2,491,274,200,000
2022	9,537,520,000,000	6,332,650,400,000	4,008,760,500,000	4,008,760,500,000	4,305,136,800,000		2,354,207,700,000
2023	10,380,338,400,000	6,857,224,300,000	4,292,754,600,000	4,292,754,600,000	4,530,548,700,000		2,596,151,100,000
Total	**174,900,358,200,000**	**117,317,535,400,000**	**71,122,854,900,000**	**71,122,854,900,000**	**73,640,226,100,000**	**9,241,740,000,000**	**40,734,245,600,000**

Table 18. IMF Database: Sector Coherence – COFOG to Economic

Year_Gregorian	1-General government	2-Central government (incl. social security funds)	6-State governments
1972		59.43%	
1973		59.97%	
1974		61.34%	
1975		63.94%	
1976		65.16%	
1977		63.93%	
1978		64.34%	
1979		63.40%	
1980	45.62%	62.45%	74.77%
1981	44.87%	60.43%	74.03%
1982	44.69%	58.91%	74.86%
1983	44.22%	57.83%	74.99%
1984	43.90%	57.22%	74.95%
1985	42.50%	55.29%	74.26%
1986	42.51%	52.78%	74.19%
1987	42.60%	53.23%	74.01%
1988	41.96%	53.01%	74.08%
1989	42.50%	53.16%	74.72%
1990	43.56%	4.47%	74.79%
1991	42.05%	0.41%	75.10%
1992	45.22%	6.63%	75.85%
1993	46.29%	6.37%	75.81%
1994	46.64%	5.91%	76.04%
1995	47.19%	6.55%	75.72%
1996	47.02%	6.87%	76.15%
1997	46.87%	5.91%	76.31%
1998	46.19%	5.52%	75.92%
1999	46.27%	5.82%	76.14%
2000	44.66%	4.55%	58.06%
2001	4.07%	1.03%	7.74%
2002	4.10%	0.96%	7.85%
2003	4.08%	0.79%	8.10%
2004	4.20%	0.79%	8.48%
2005	4.21%	0.55%	8.65%
2006	4.31%	0.81%	8.69%
2007	4.37%	0.81%	8.66%
2008	4.23%	0.80%	8.57%
2009	4.07%	0.79%	8.30%
2010	4.05%	0.70%	8.43%
2011	4.15%	0.73%	8.58%
2012	4.21%	0.81%	8.57%
2013	4.29%	1.00%	8.52%
2014	4.29%	0.95%	8.51%
2015	4.32%	0.95%	8.42%
2016	4.37%	1.00%	8.44%
2017	4.41%	0.99%	8.54%
2018	4.40%	0.98%	8.55%
2019	4.33%	1.01%	8.42%
2020	3.40%	0.41%	8.30%
2021	2.47%	0.73%	7.92%
2022	4.81%	0.39%	11.10%

Nb: Perfect coherence mean total expenditure under economic classifications and COFOG are the same and represented by 0% in the above table

Figure 78. Total Revenues

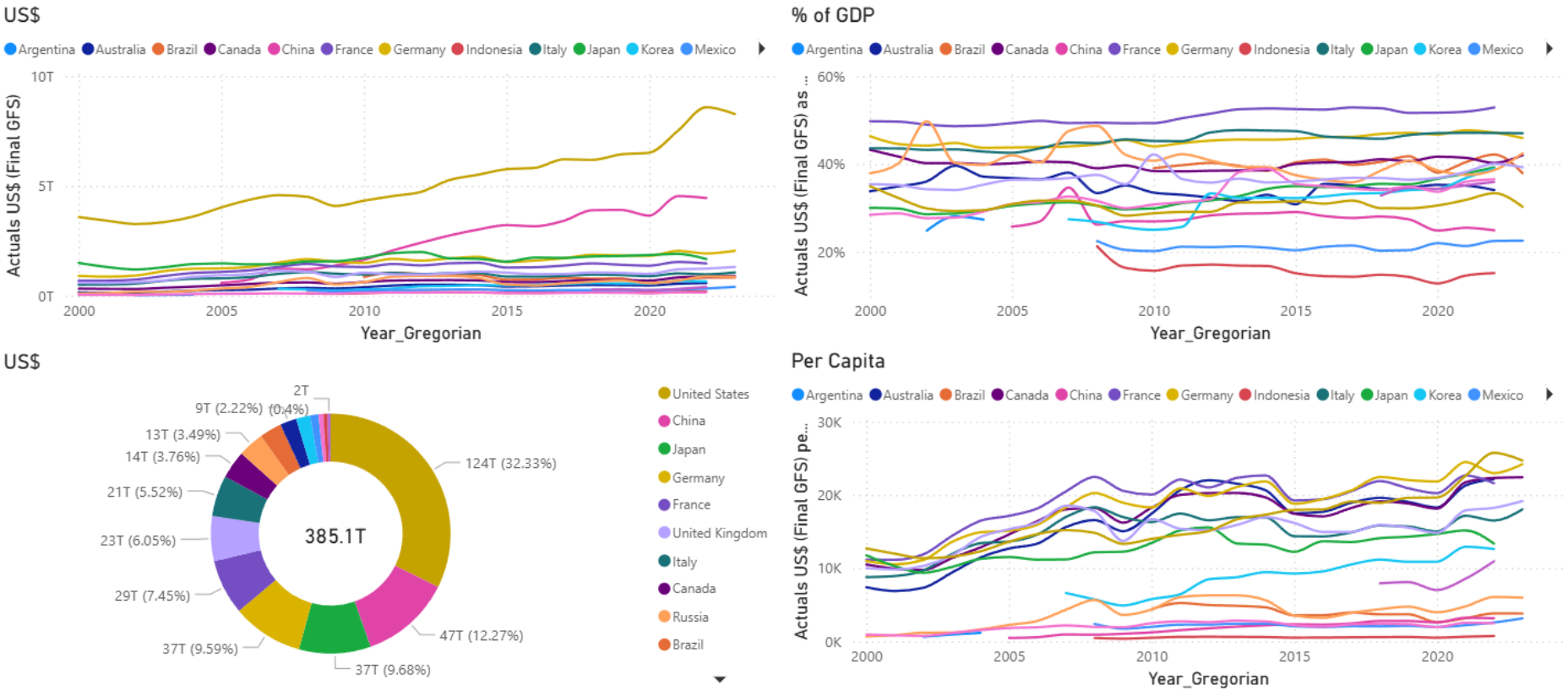
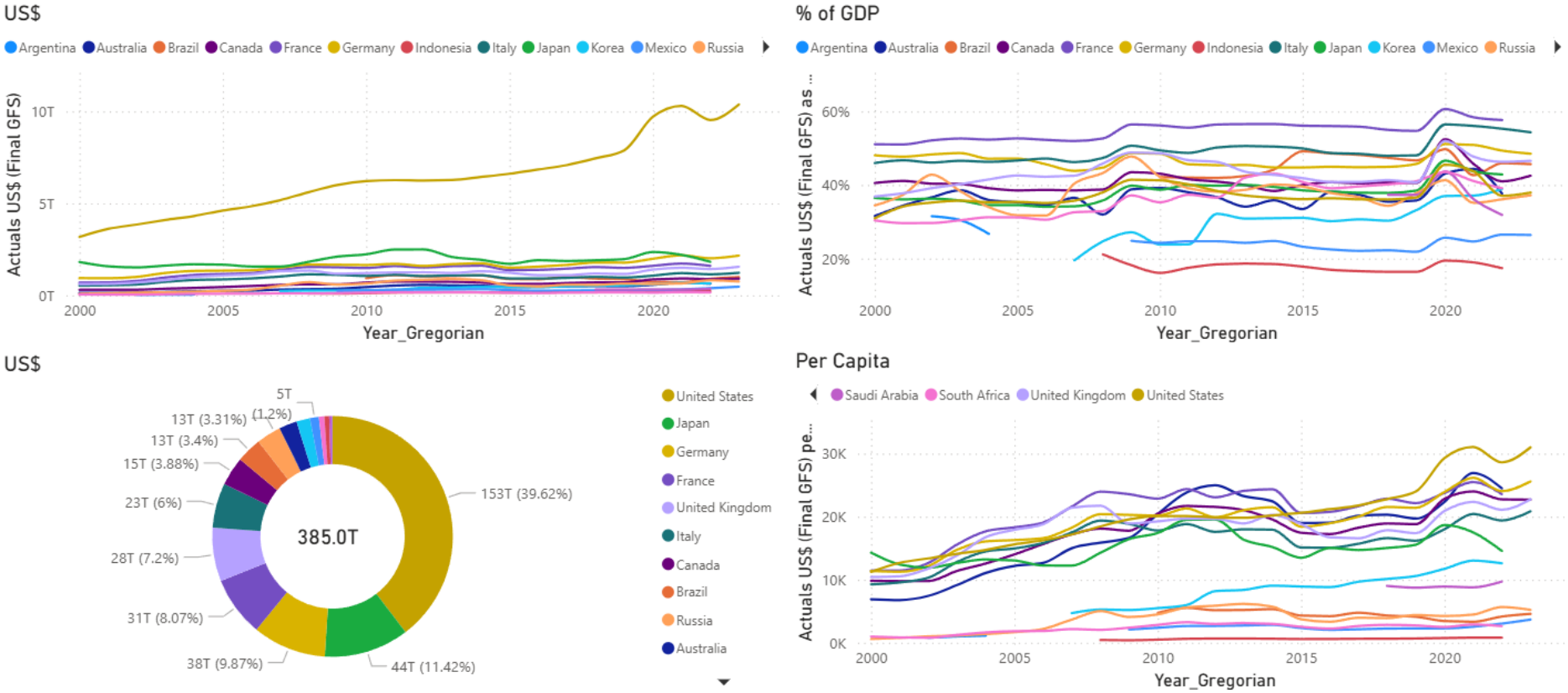


Figure 79. Total Expenditures (Economic)



Functions and Outcomes (Efficiency and Value for Money)

Social Security

Figure 80. Key Functions: General Government - Social Protection (COFOG) FTM Losses

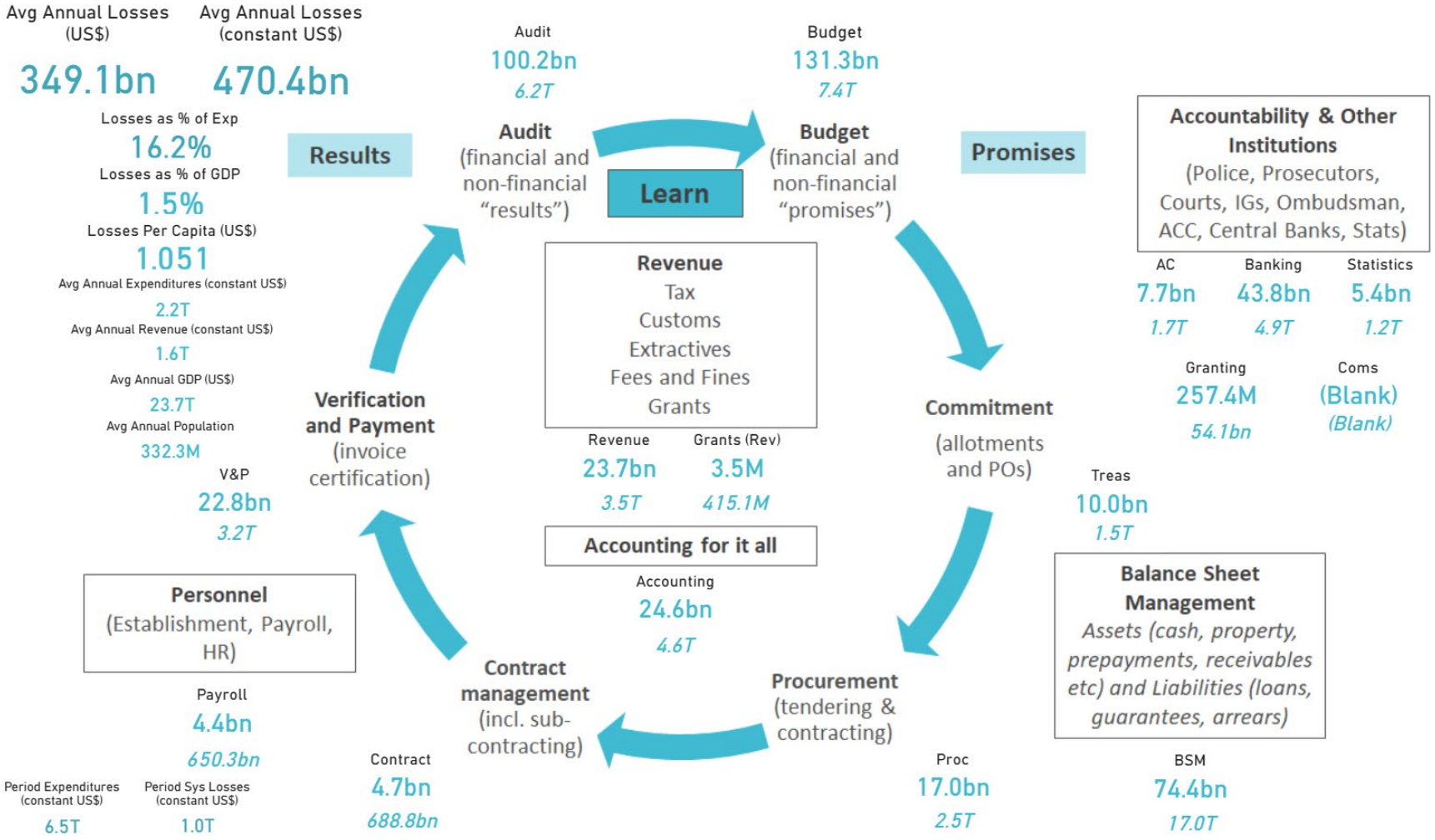


Figure 81. Key Functions: General Government Social Security – Social Protection (COFOG)

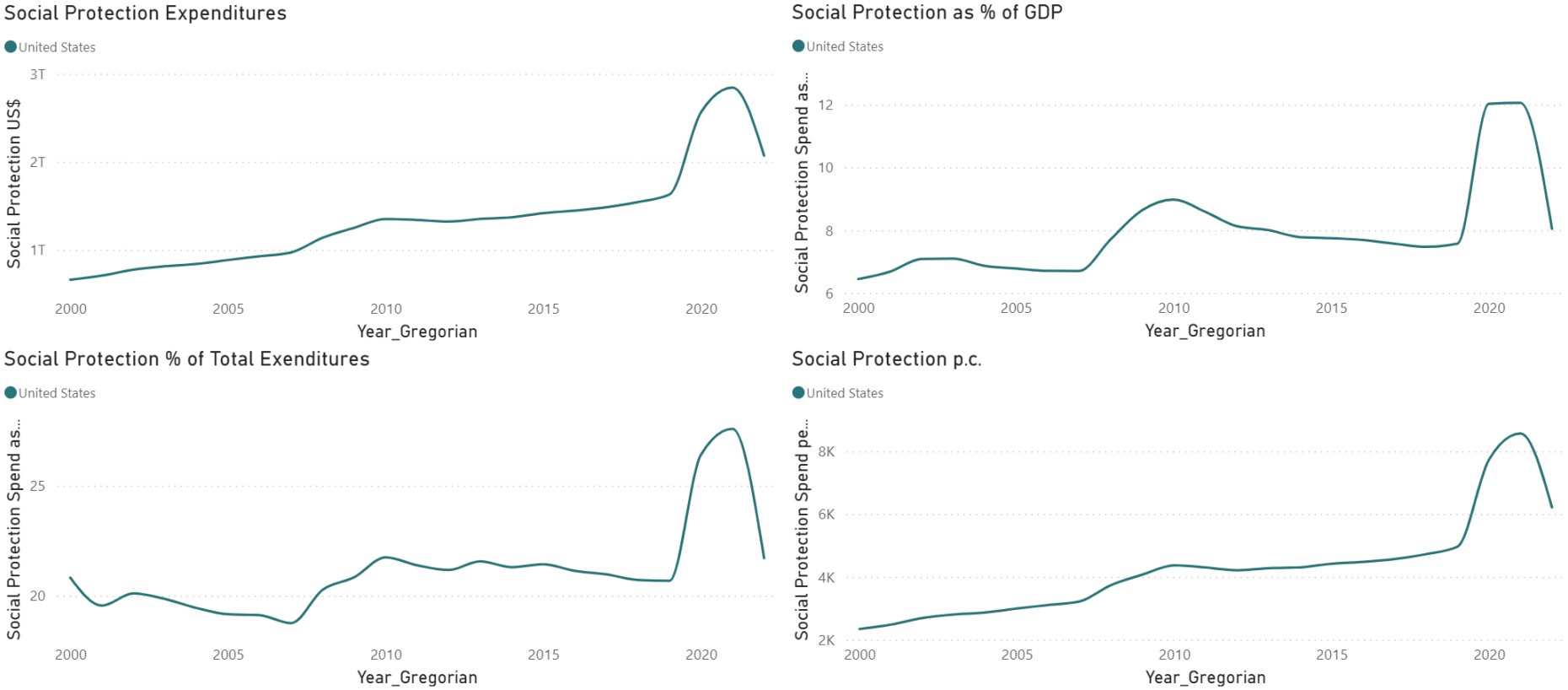


Figure 82. Key Functions: State Government Social Security – Social Protection (COFOG)

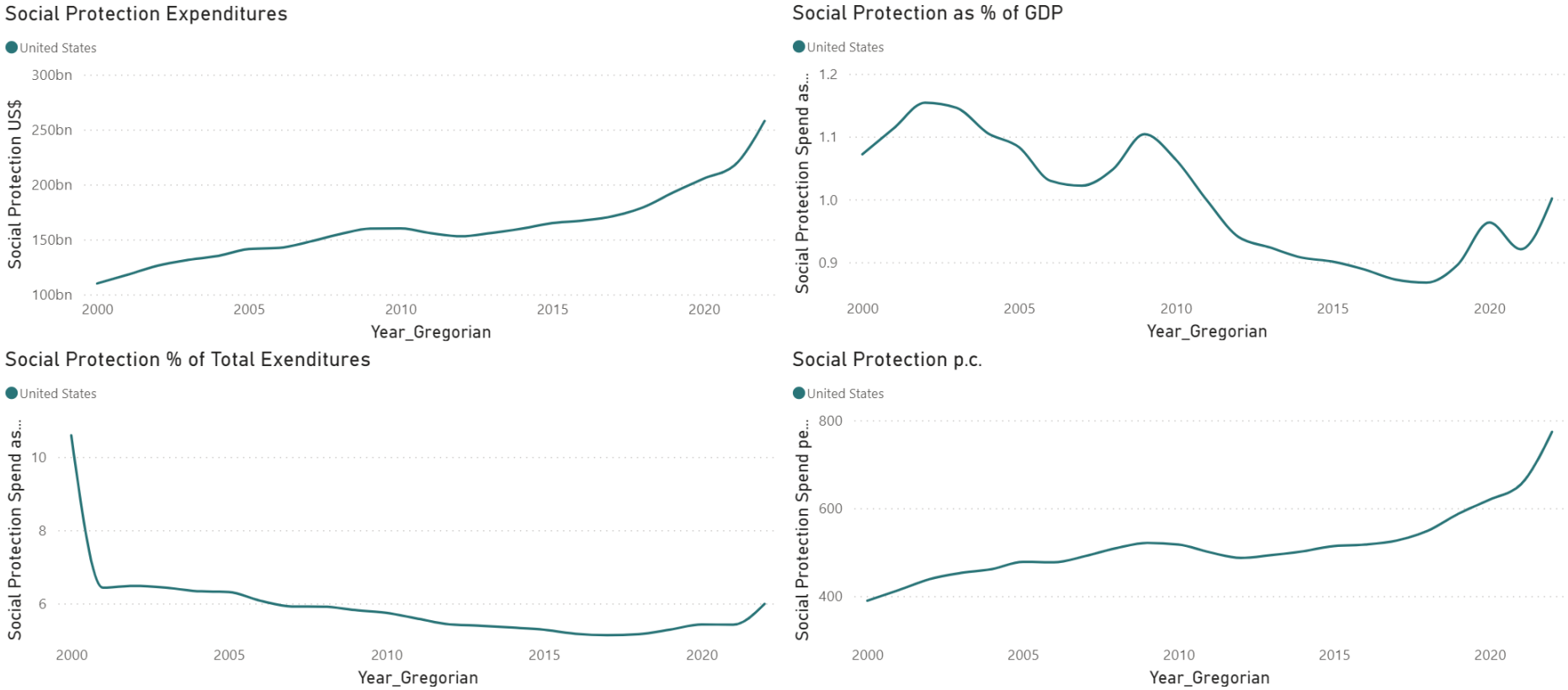
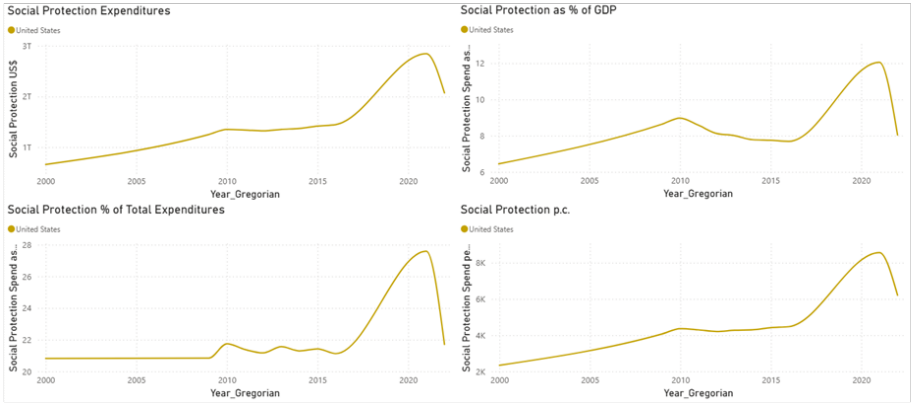


Figure 83. Key Functions: GG Social Security – Social Protection: Democrat V's Republican Presidents

General Government Sector

Democratic Presidents



Republican Presidents

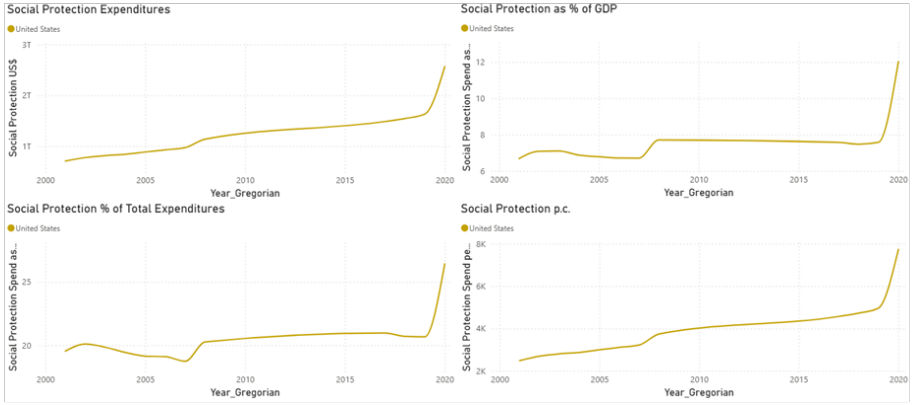


Figure 84. Key Functions: GG Social Security – Social Protection: G20+5 Country Comparators

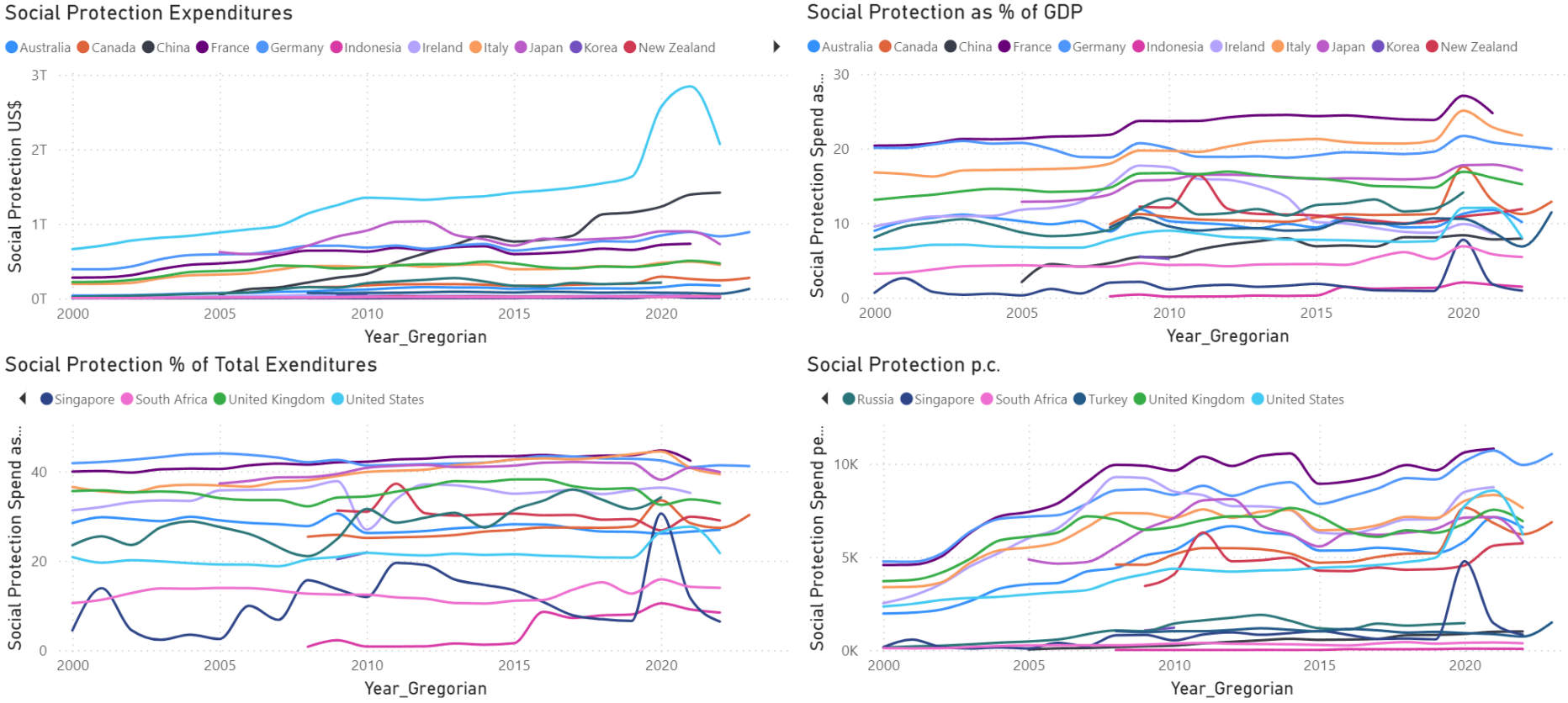


Figure 85. Key Functions: GG Social Security – Social Contributions

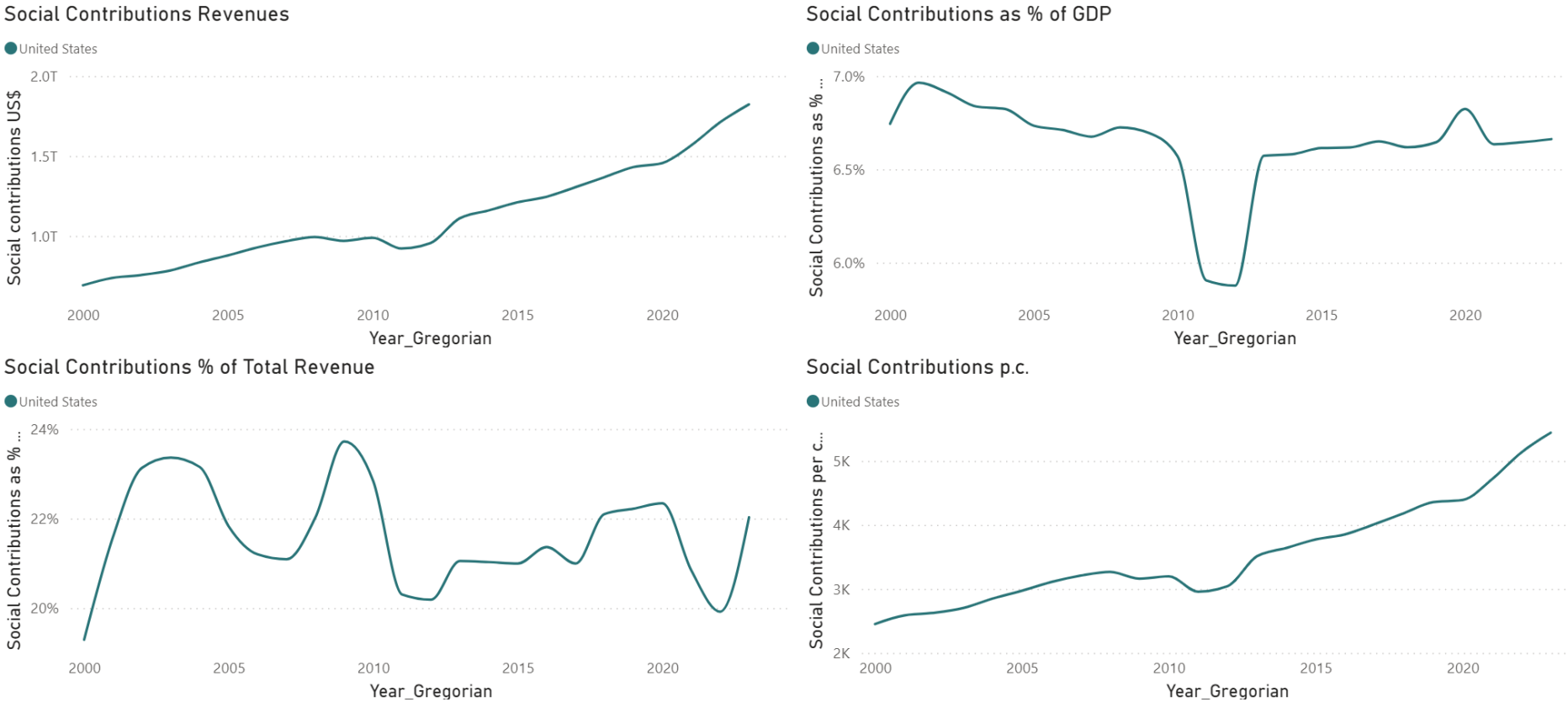


Figure 86. Key Functions: GG Social Security – Social Contributions: G20+5

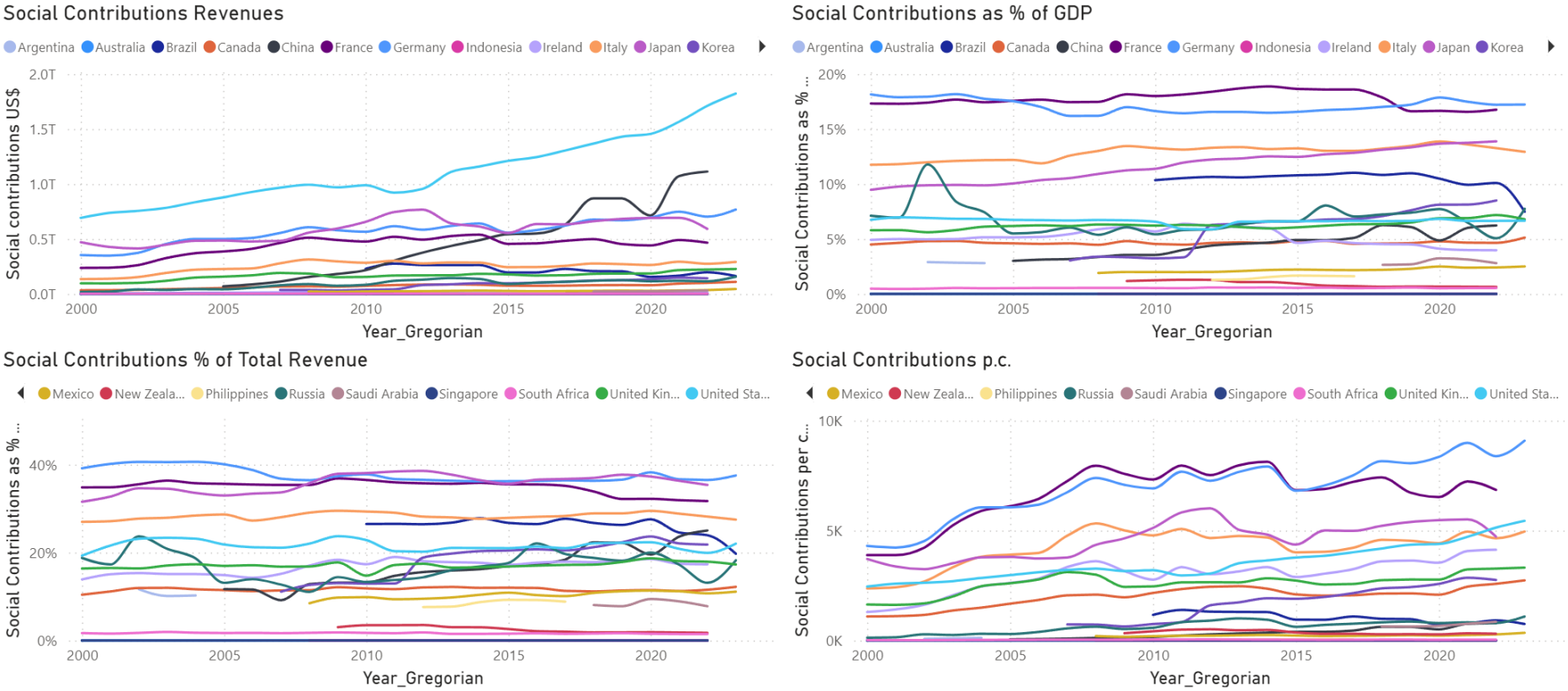


Figure 87. Key Functions: GG Social Security – Social Benefits

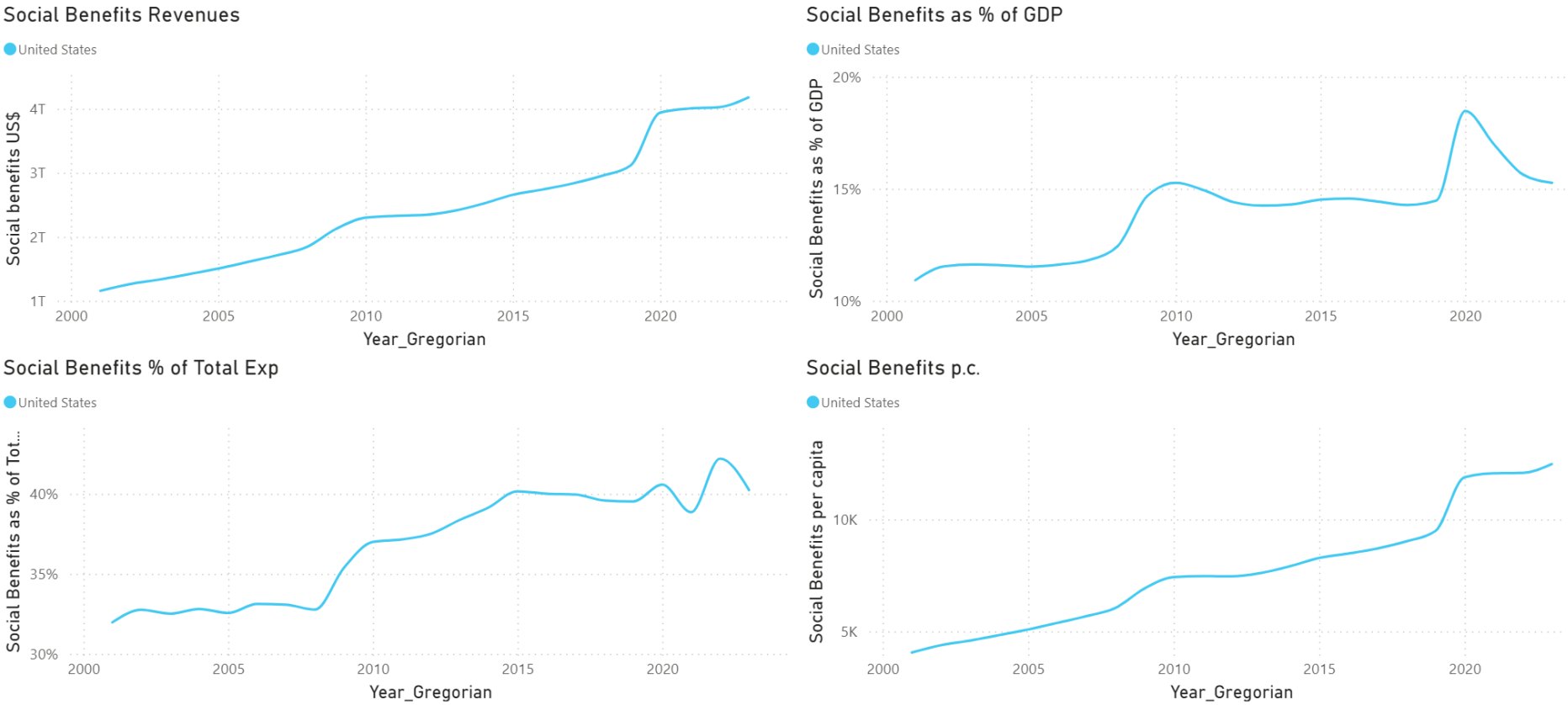


Figure 88. Key Functions: State Government Social Security – Social Benefits

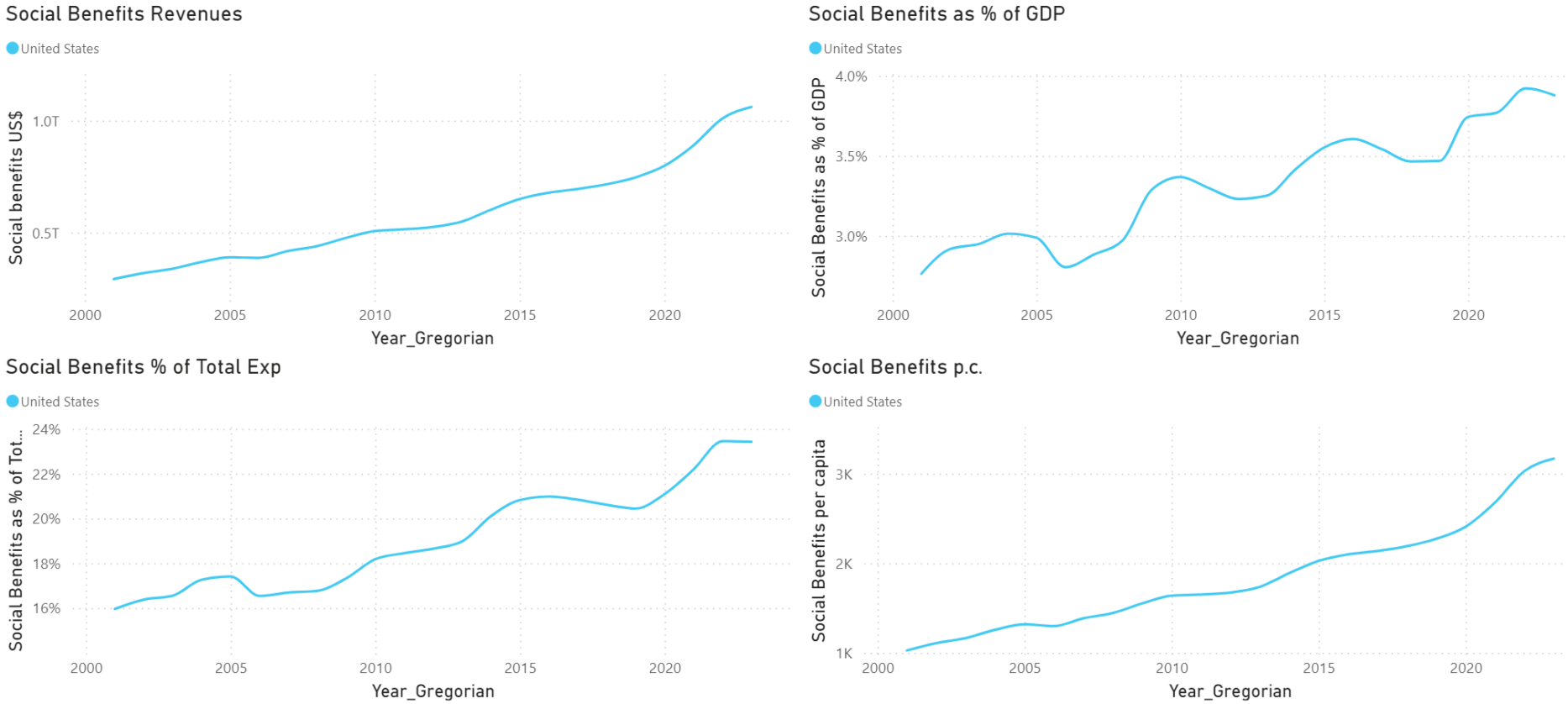


Figure 89. Key Functions: GG Social Security – Social Benefits: G20+5

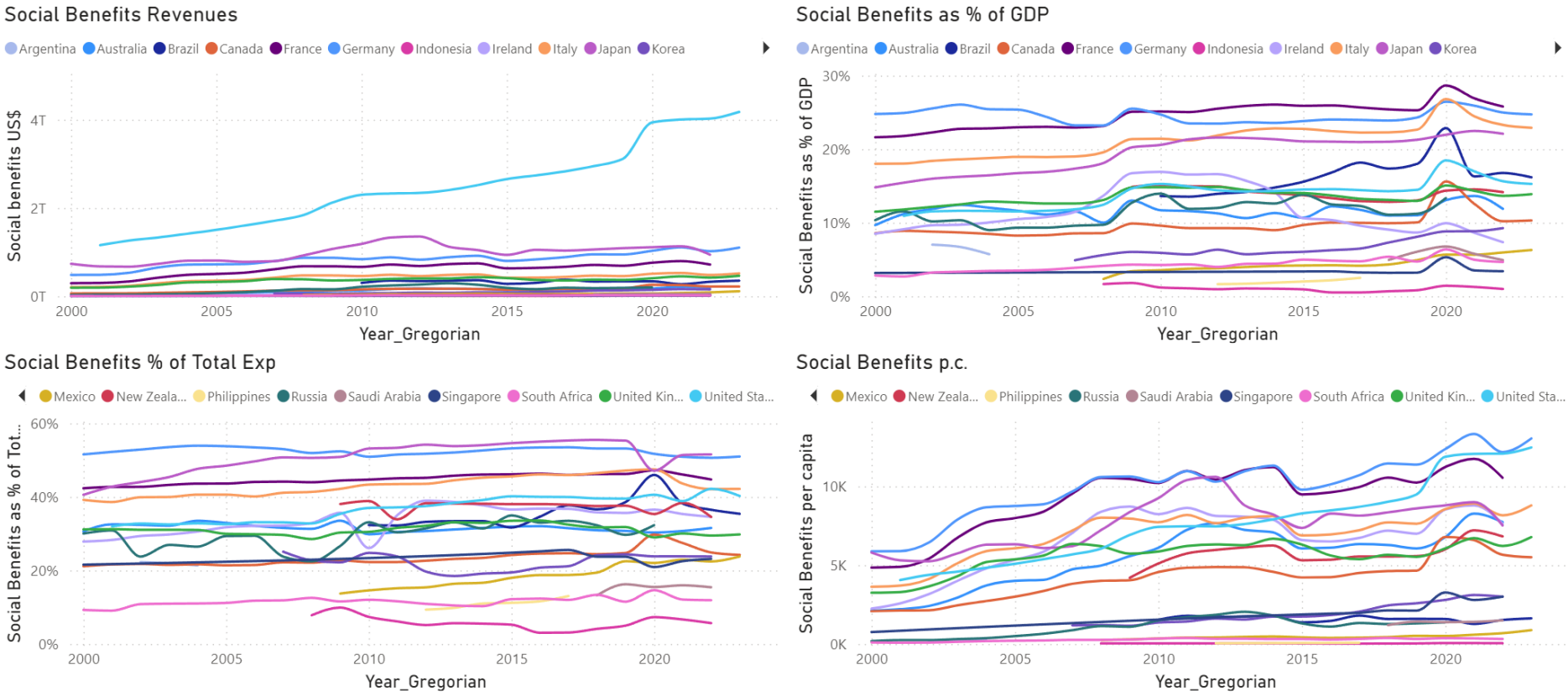


Figure 90. Key Functions: GG Social Security – Net Social Benefits: G20+5

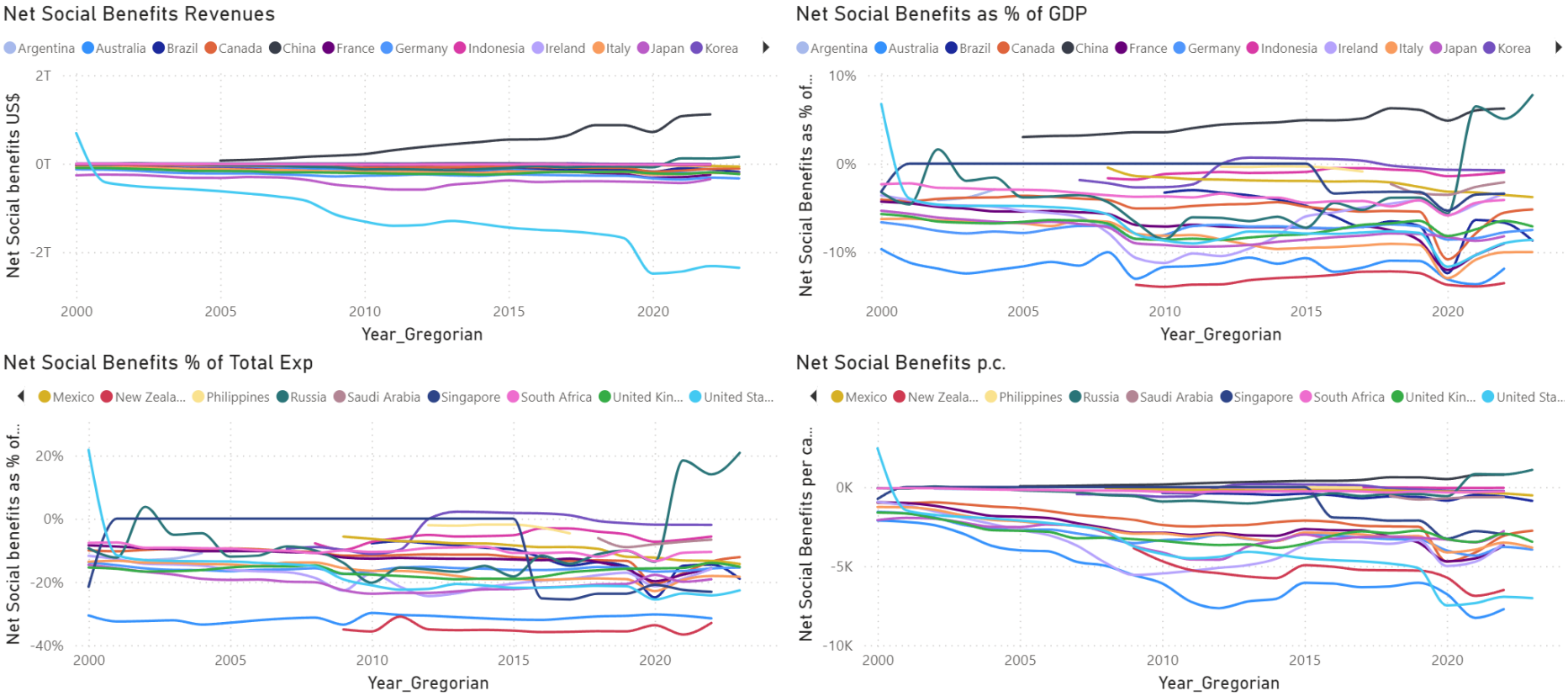
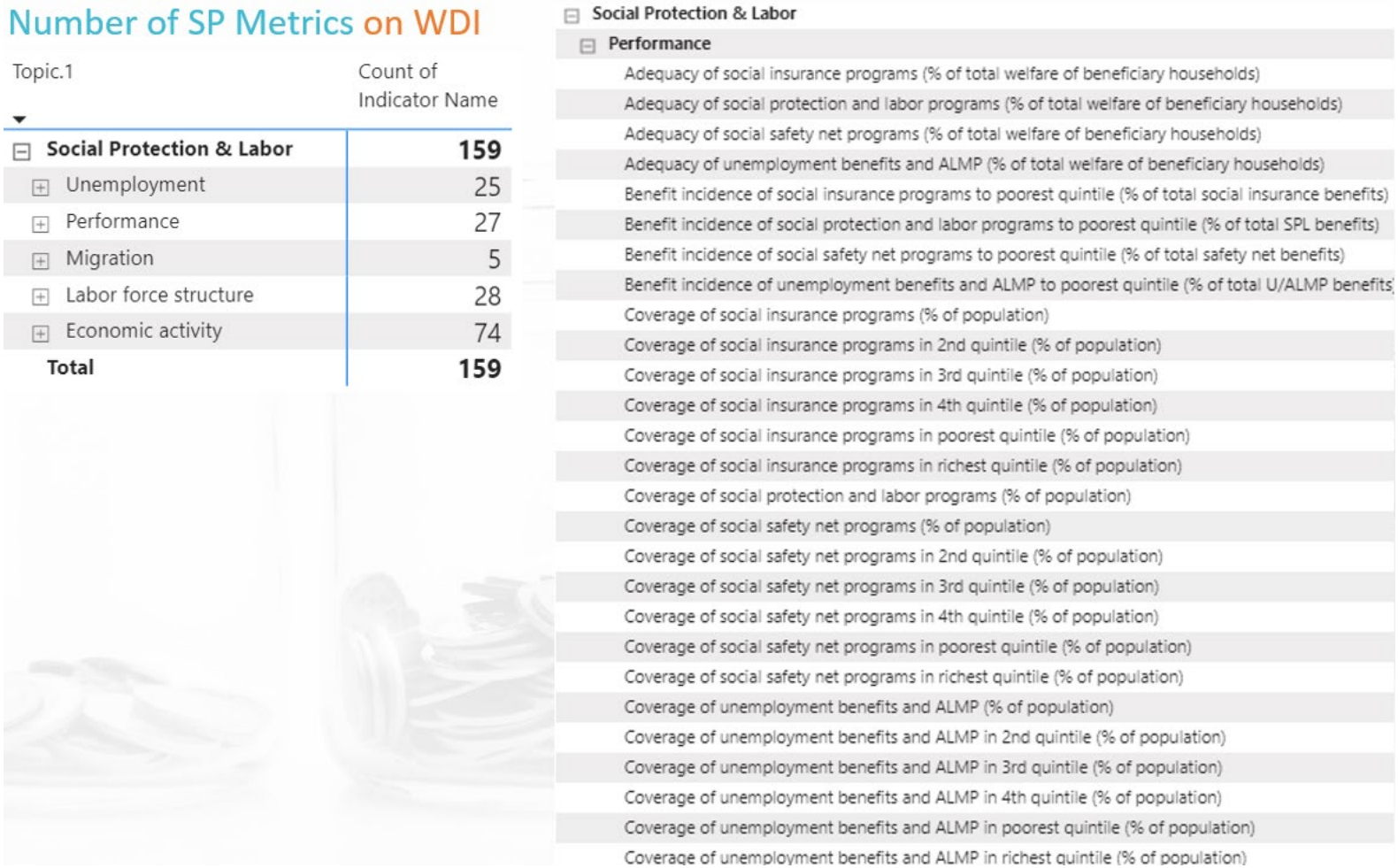


Figure 91. Non-Financial Performance Outcome Metrics: WDI Coverage of Social Protection Metrics



Number of SP Metrics on WDI

Topic.1	Count of Indicator Name
Social Protection & Labor	**159**
Unemployment	25
Performance	27
Migration	5
Labor force structure	28
Economic activity	74
Total	**159**

Social Protection & Labor
Performance
Adequacy of social insurance programs (% of total welfare of beneficiary households)
Adequacy of social protection and labor programs (% of total welfare of beneficiary households)
Adequacy of social safety net programs (% of total welfare of beneficiary households)
Adequacy of unemployment benefits and ALMP (% of total welfare of beneficiary households)
Benefit incidence of social insurance programs to poorest quintile (% of total social insurance benefits)
Benefit incidence of social protection and labor programs to poorest quintile (% of total SPL benefits)
Benefit incidence of social safety net programs to poorest quintile (% of total safety net benefits)
Benefit incidence of unemployment benefits and ALMP to poorest quintile (% of total U/ALMP benefits)
Coverage of social insurance programs (% of population)
Coverage of social insurance programs in 2nd quintile (% of population)
Coverage of social insurance programs in 3rd quintile (% of population)
Coverage of social insurance programs in 4th quintile (% of population)
Coverage of social insurance programs in poorest quintile (% of population)
Coverage of social insurance programs in richest quintile (% of population)
Coverage of social protection and labor programs (% of population)
Coverage of social safety net programs (% of population)
Coverage of social safety net programs in 2nd quintile (% of population)
Coverage of social safety net programs in 3rd quintile (% of population)
Coverage of social safety net programs in 4th quintile (% of population)
Coverage of social safety net programs in poorest quintile (% of population)
Coverage of social safety net programs in richest quintile (% of population)
Coverage of unemployment benefits and ALMP (% of population)
Coverage of unemployment benefits and ALMP in 2nd quintile (% of population)
Coverage of unemployment benefits and ALMP in 3rd quintile (% of population)
Coverage of unemployment benefits and ALMP in 4th quintile (% of population)
Coverage of unemployment benefits and ALMP in poorest quintile (% of population)
Coverage of unemployment benefits and ALMP in richest quintile (% of population)

Figure 92. Non-Financial Performance Outcome Metrics: Social Security – Poverty

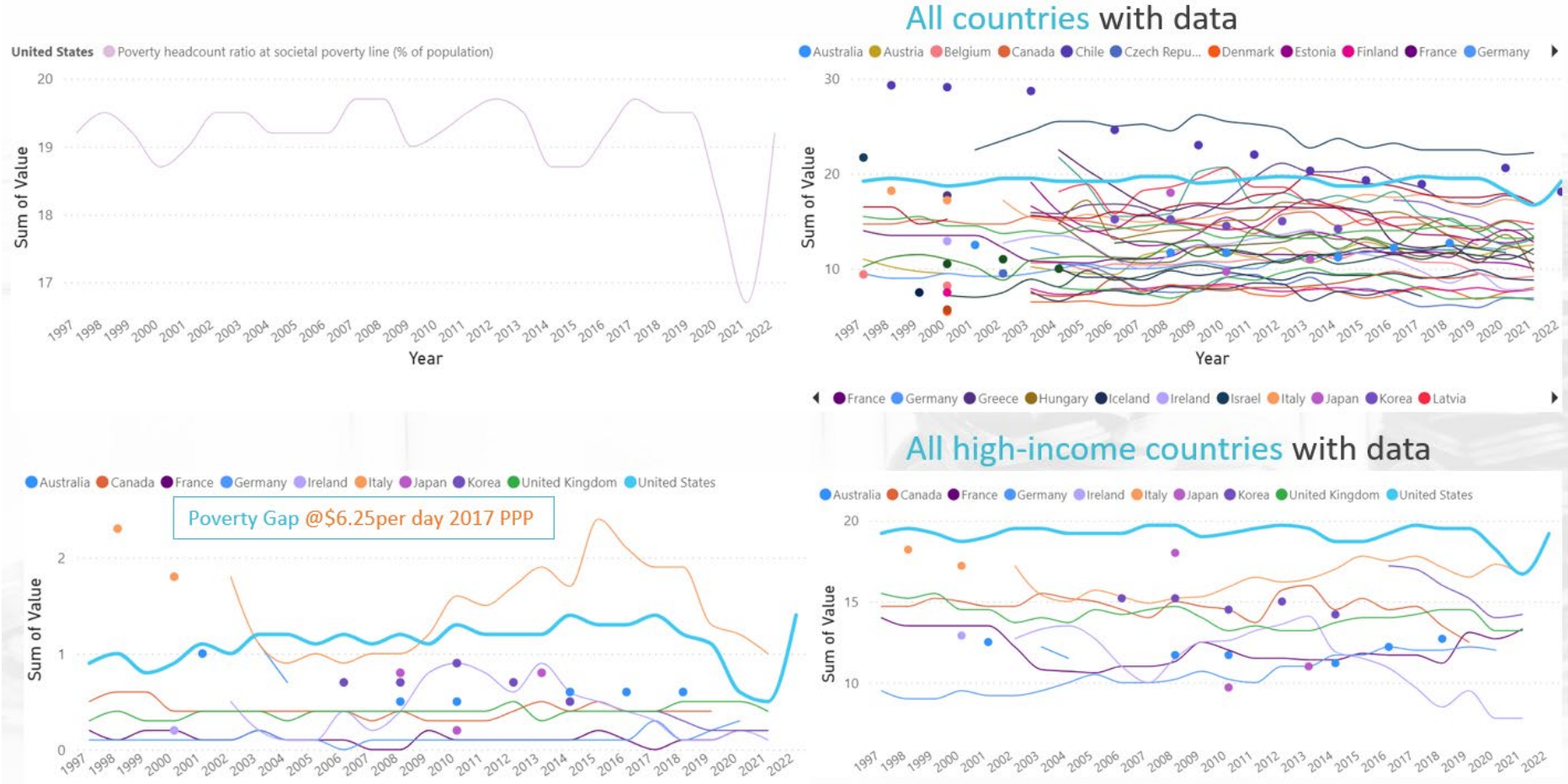


Figure 93. Non-Financial Performance Outcome Metrics: Social Security – Labour Force Participation

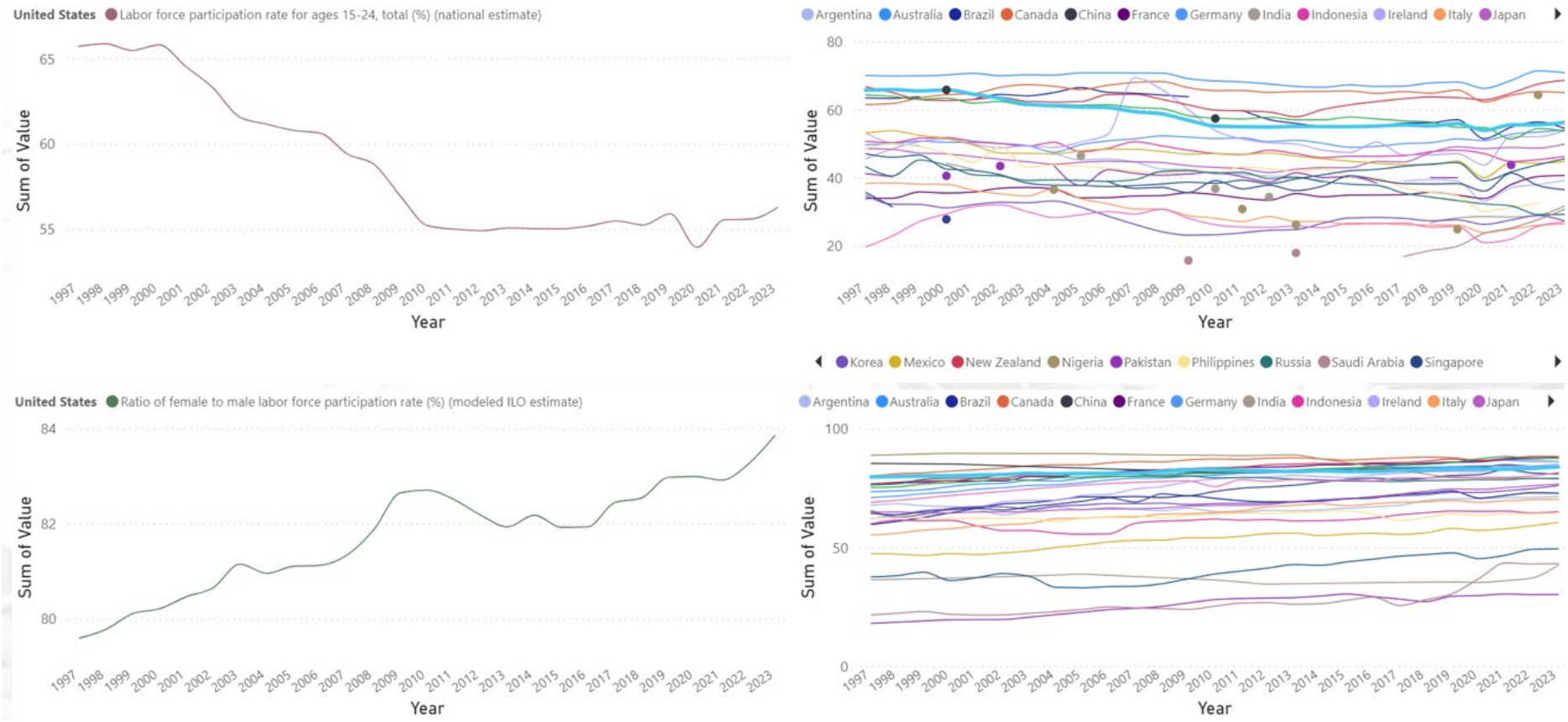


Figure 94. Non-Financial Performance Outcome Metrics: Social Security – Unemployment and Migrant Stock

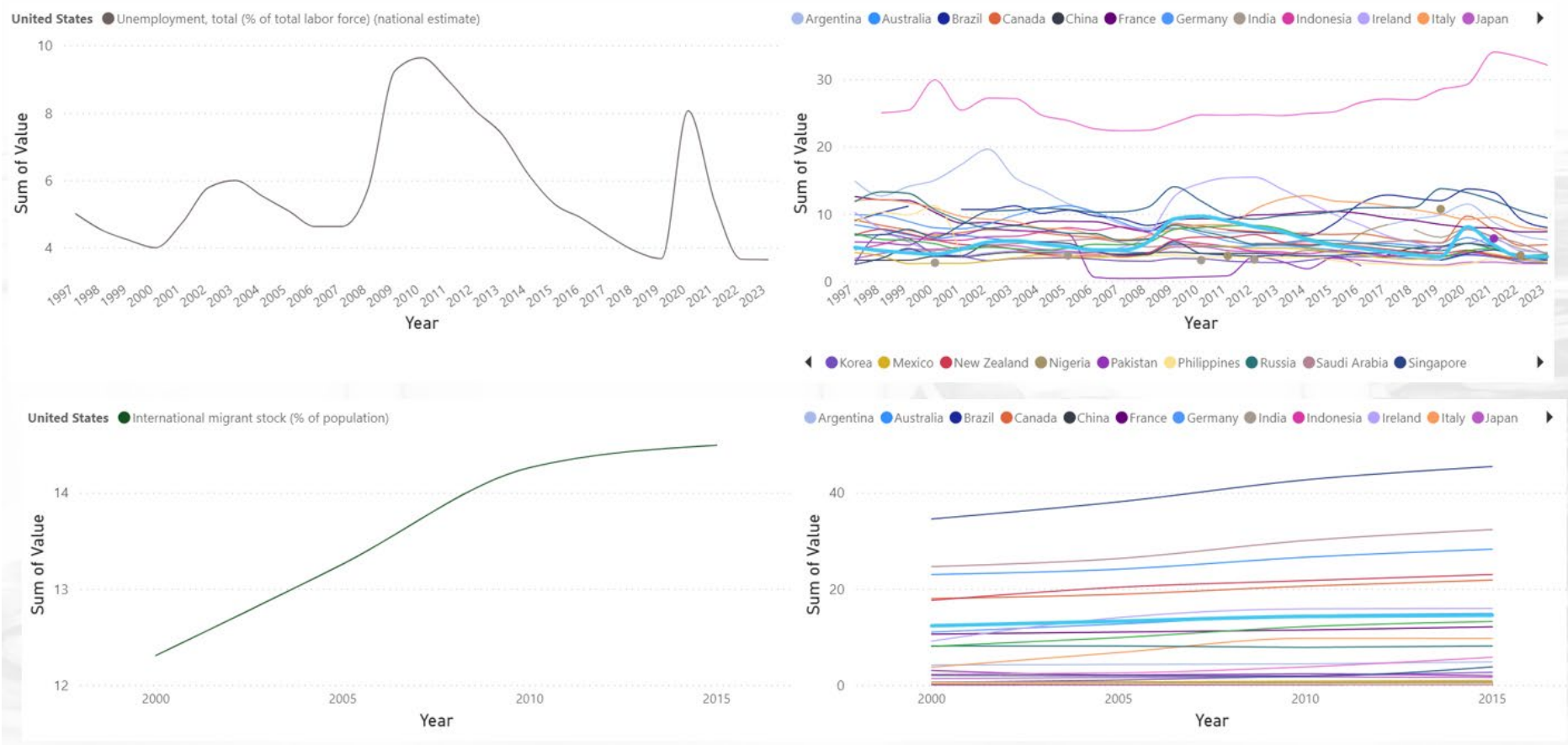


Figure 95. Non-Financial Performance Outcome Metrics: Social Security – Refugee Population

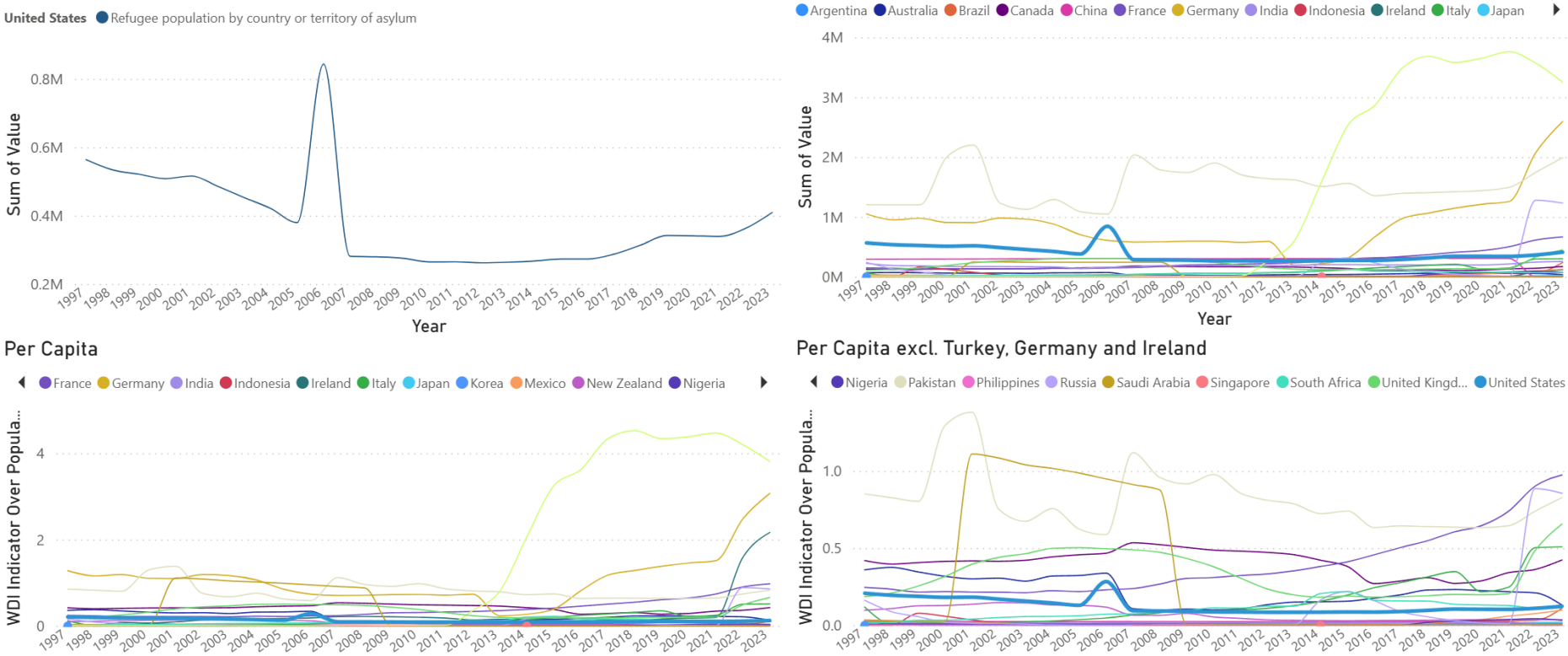


Figure 96. Non-Financial Performance Outcome Metrics: Social Security – Unemployment in Agriculture, Industry and Services

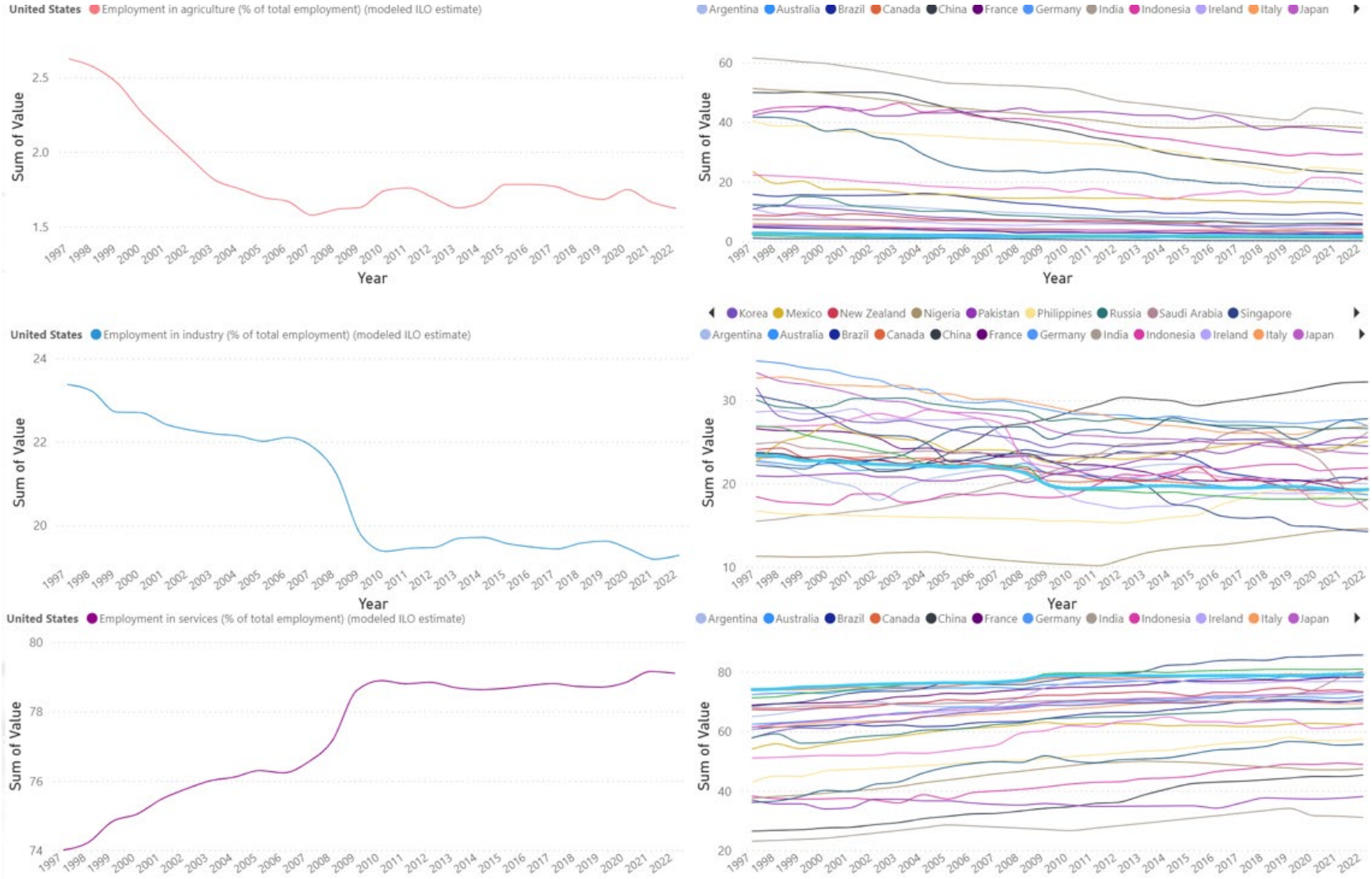
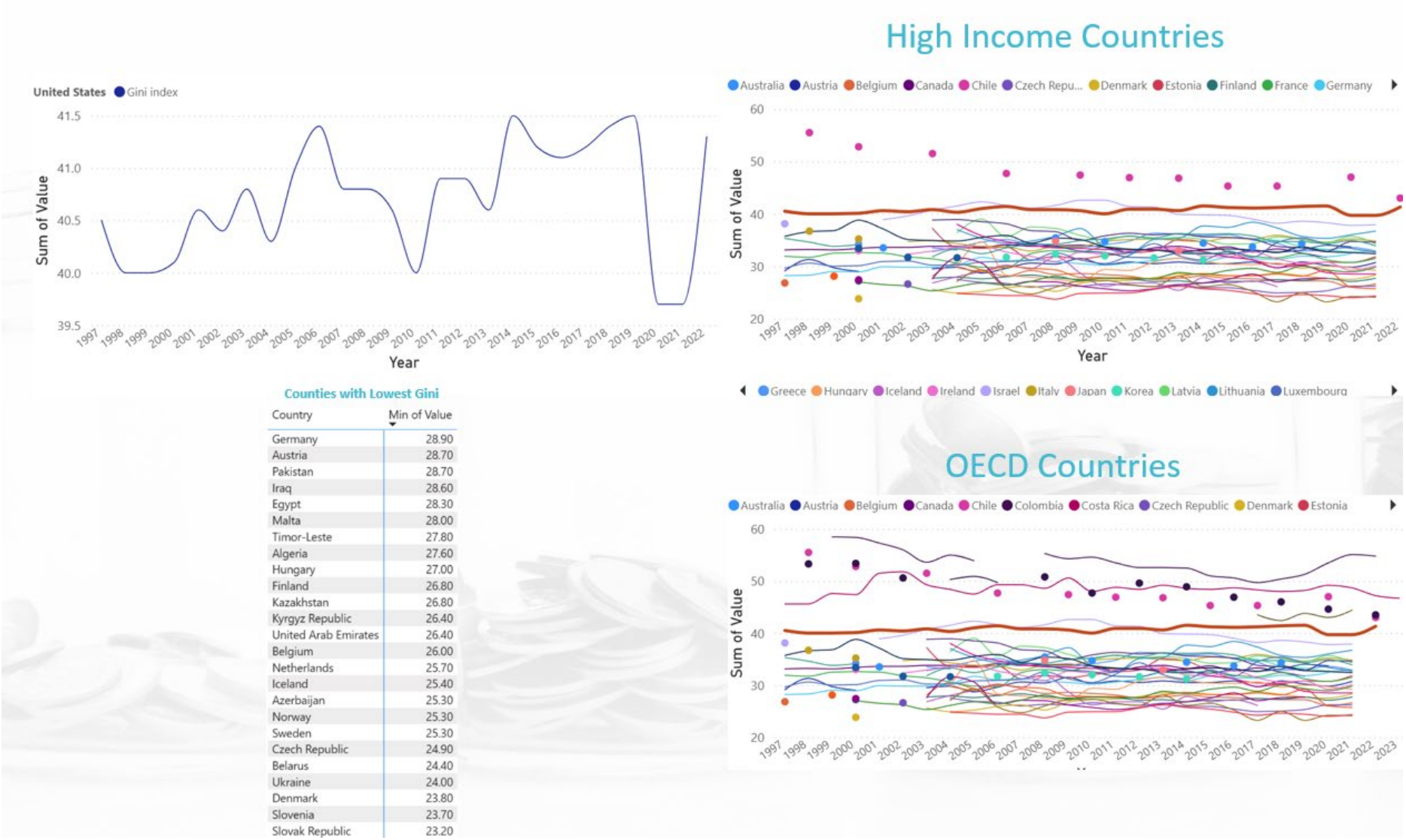


Figure 97. Non-Financial Performance Outcome Metrics: Social Security – Inequality (Gini Coefficient)



Counties with Lowest Gini

Country	Min of Value
Germany	28.90
Austria	28.70
Pakistan	28.70
Iraq	28.60
Egypt	28.30
Malta	28.00
Timor-Leste	27.80
Algeria	27.60
Hungary	27.00
Finland	26.80
Kazakhstan	26.80
Kyrgyz Republic	26.40
United Arab Emirates	26.40
Belgium	26.00
Netherlands	25.70
Iceland	25.40
Azerbaijan	25.30
Norway	25.30
Sweden	25.30
Czech Republic	24.90
Belarus	24.40
Ukraine	24.00
Denmark	23.80
Slovenia	23.70
Slovak Republic	23.20

Defence

Figure 98. Key Functions: General Government Defence (COFOG) FTM Losses

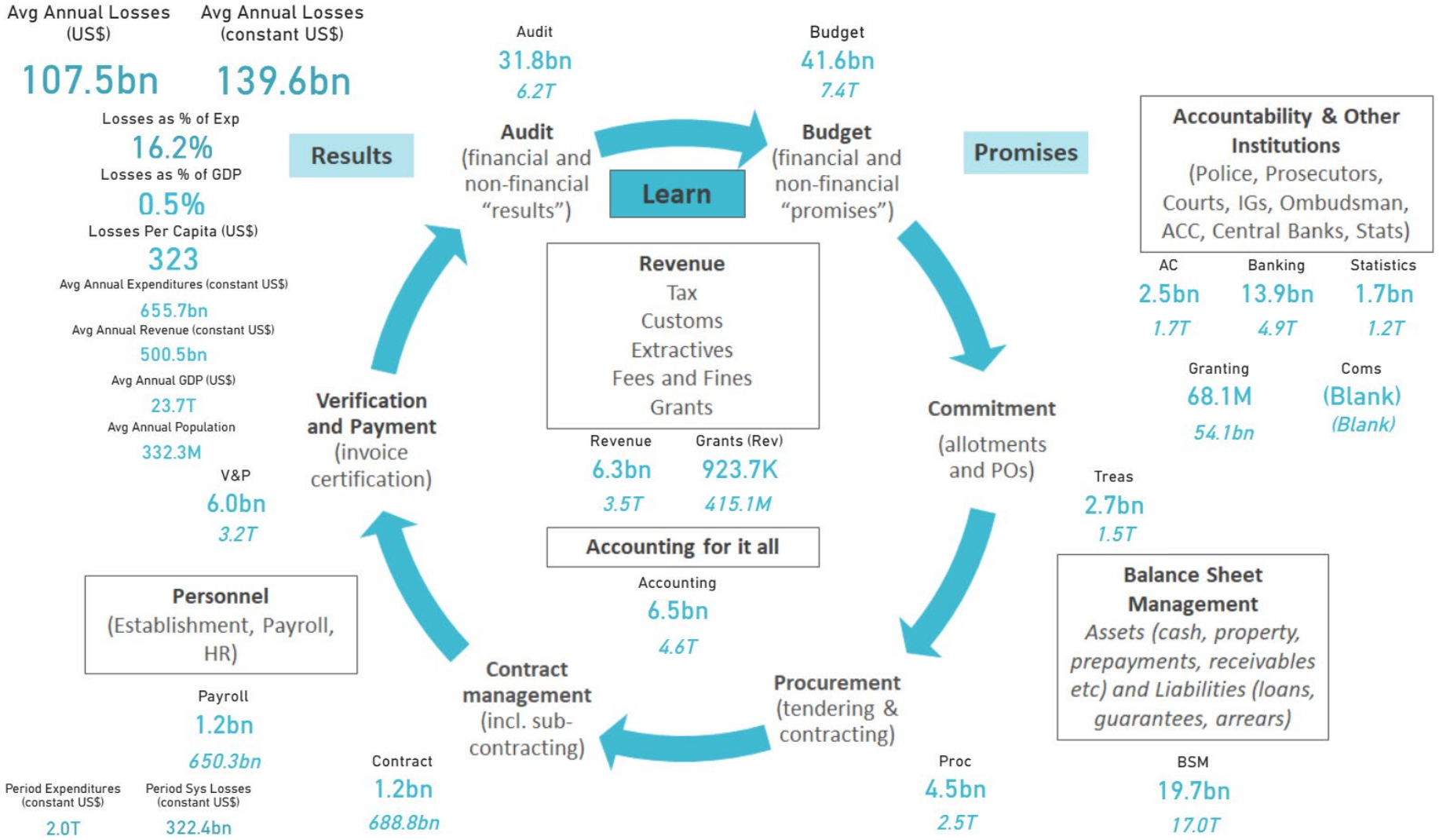


Figure 99. Key Functions: GG Defence: G20+5

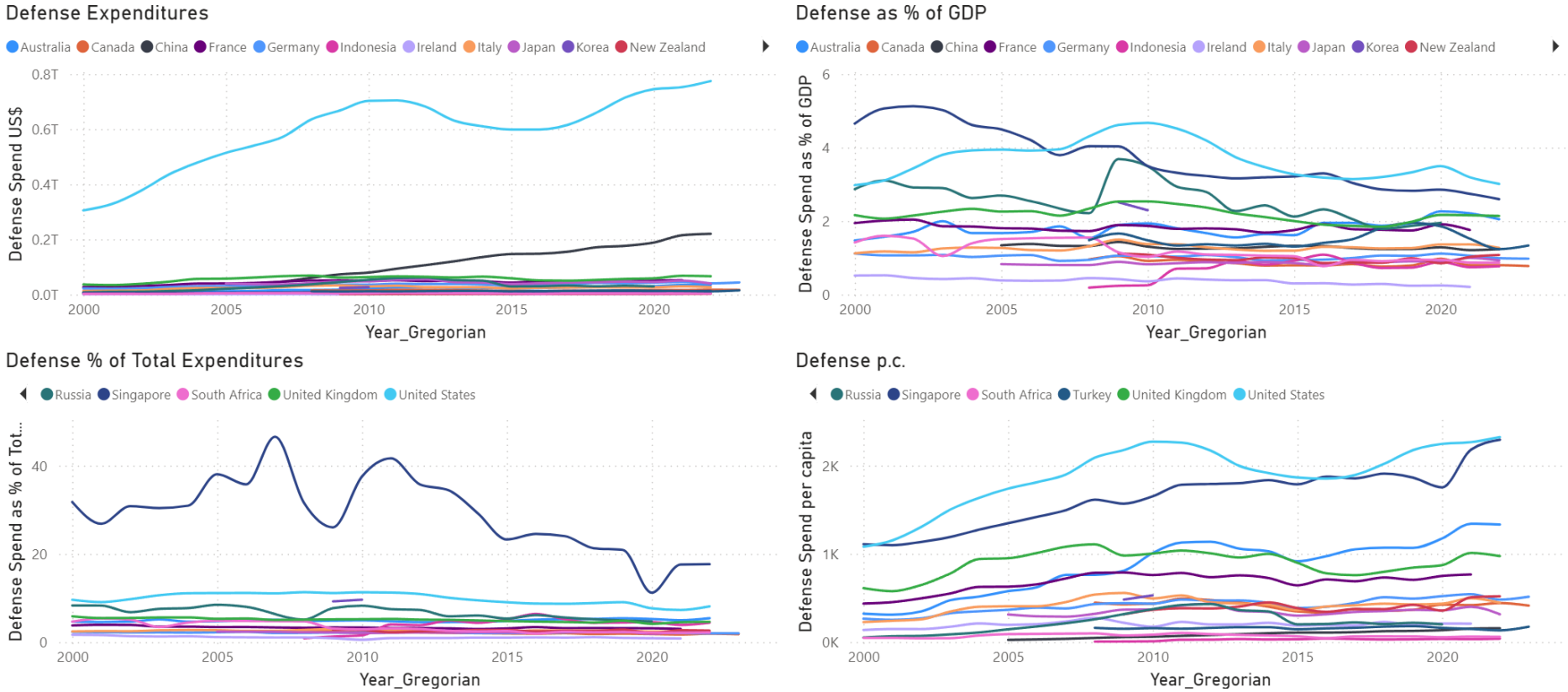
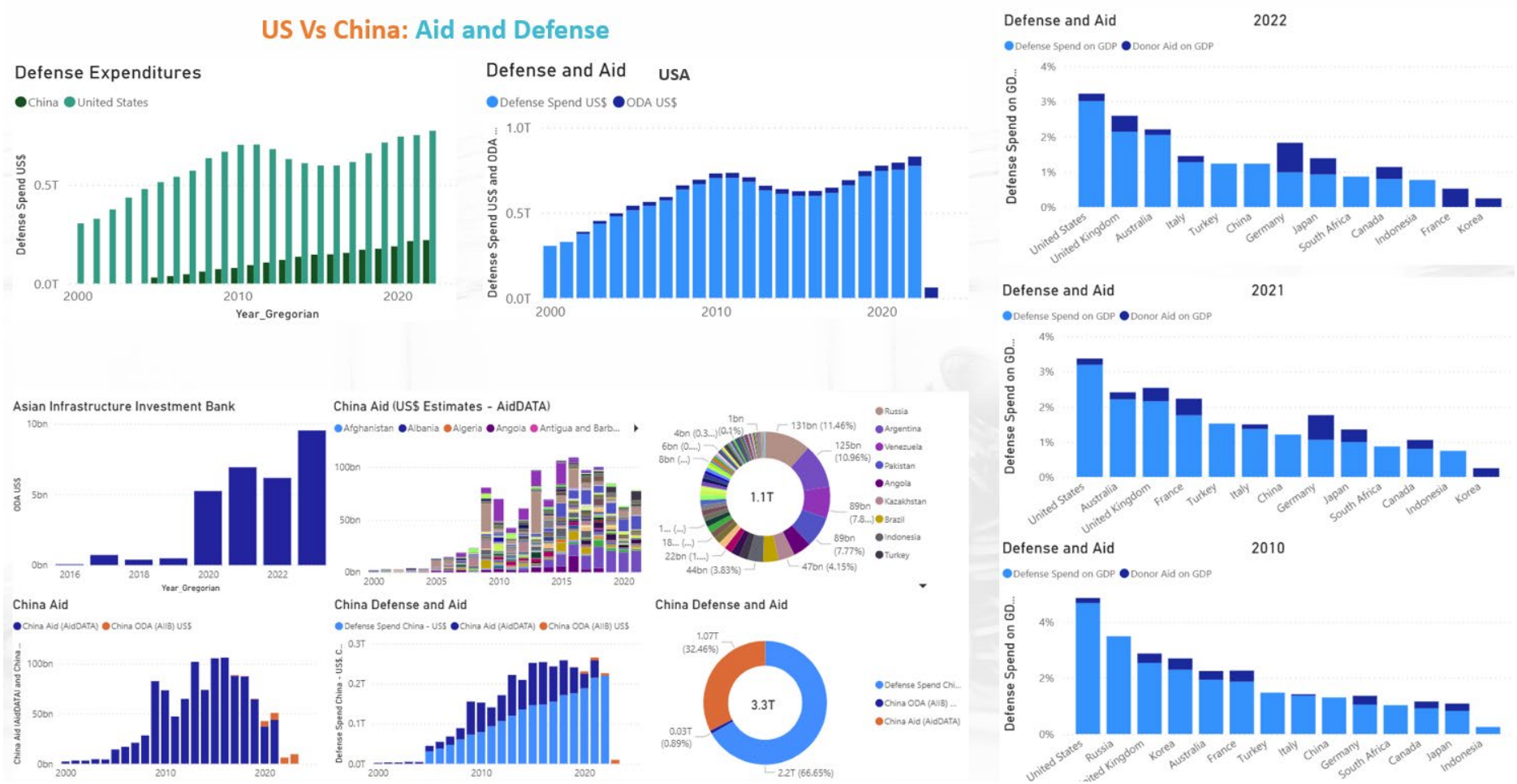


Figure 100. Projection of Power – Defense and Aid



Data sources: OECD DAC for US and AIIB aid. AidDATA for China Aid. IMF GFS COFOG for Defense Spending. WDI for GDP.

Figure 101. Key Functions: General Government - Public Order and Safety (COFOG) FTM Losses

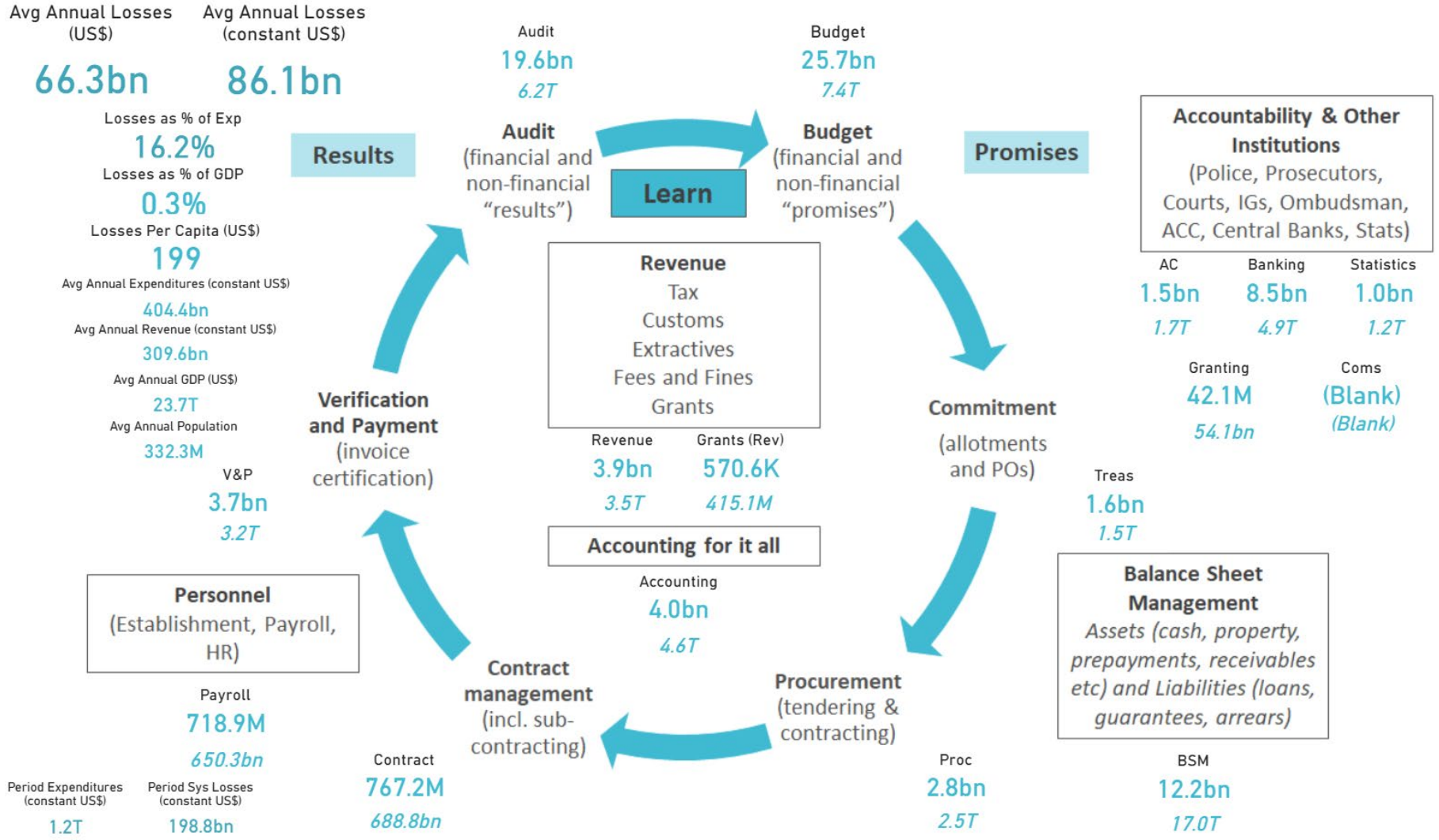


Figure 102. Key Functions: GG Public Order and Safety

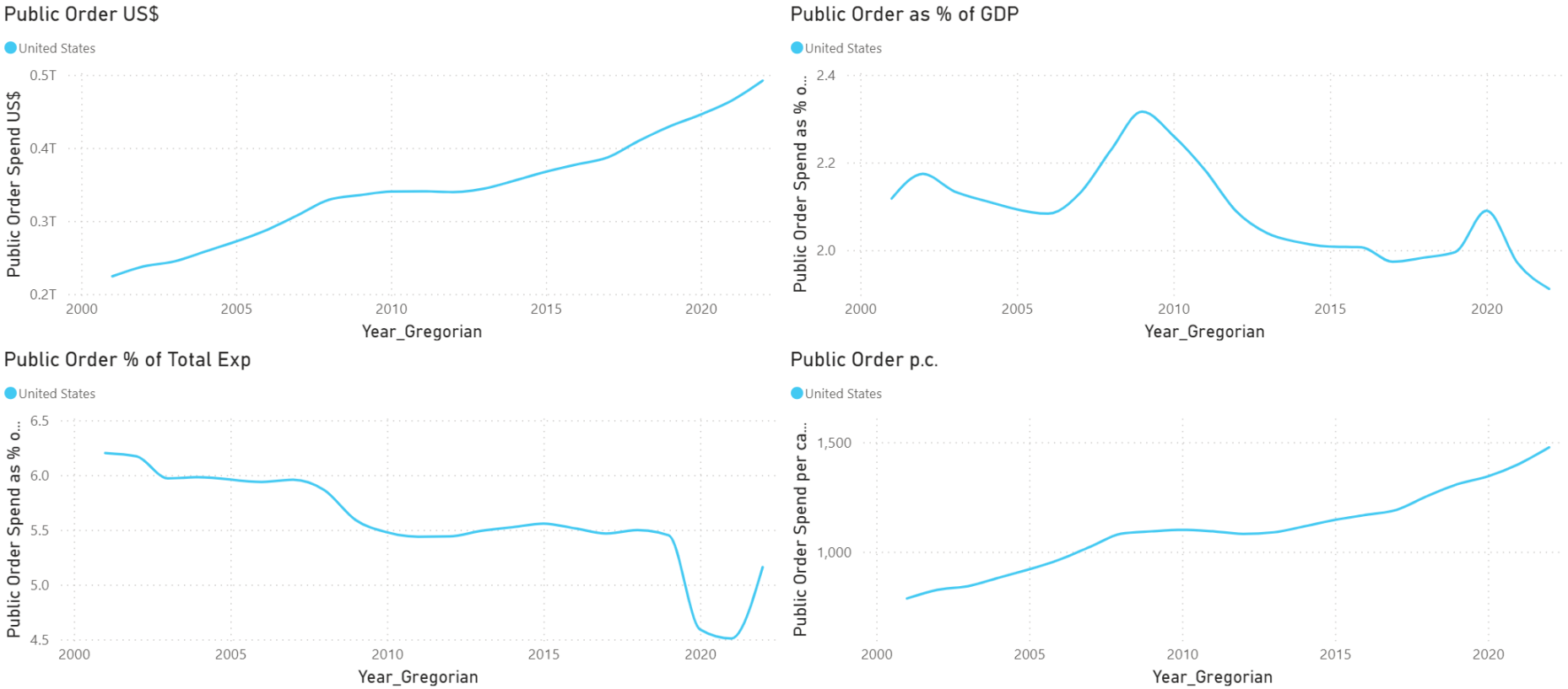


Figure 103. Key Functions: State Government Public Order and Safety

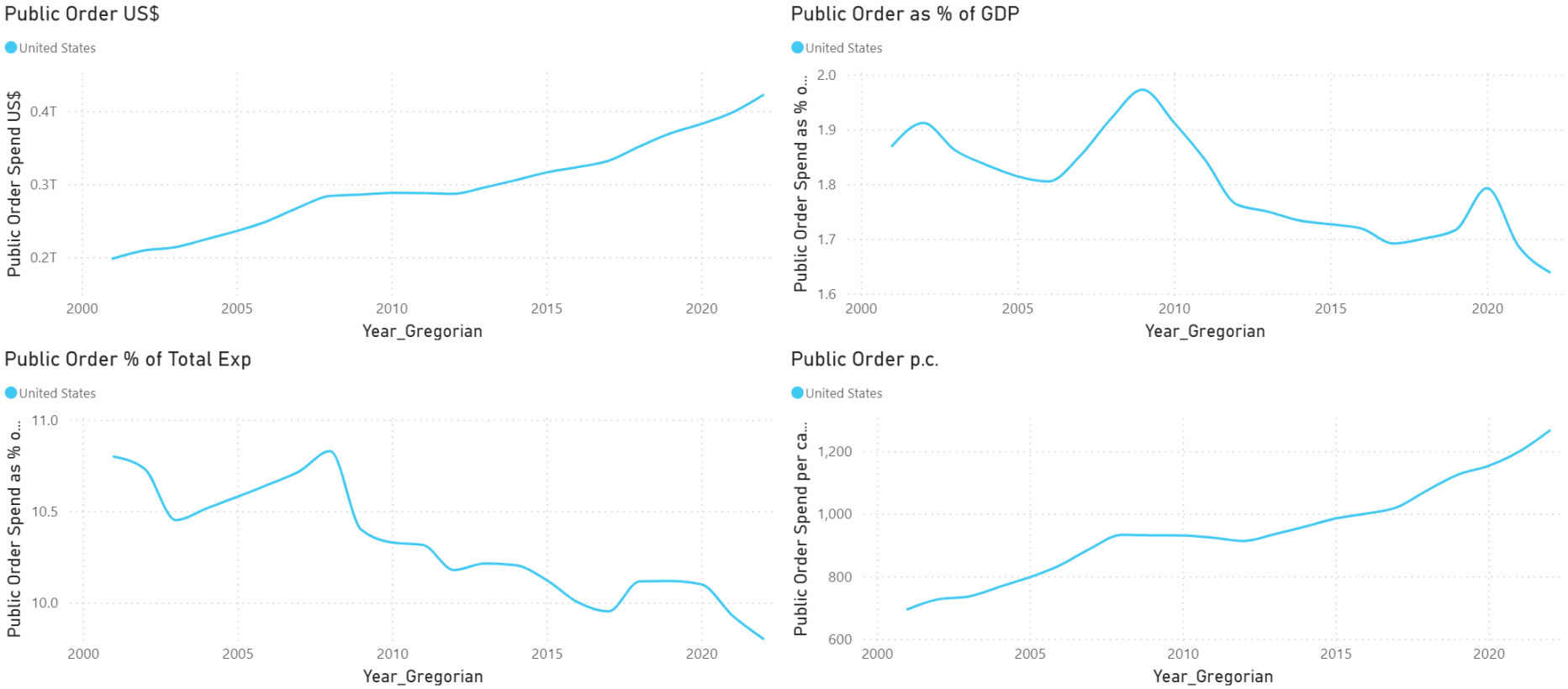


Figure 104. Key Functions: GG Public Order and Safety: G20+5

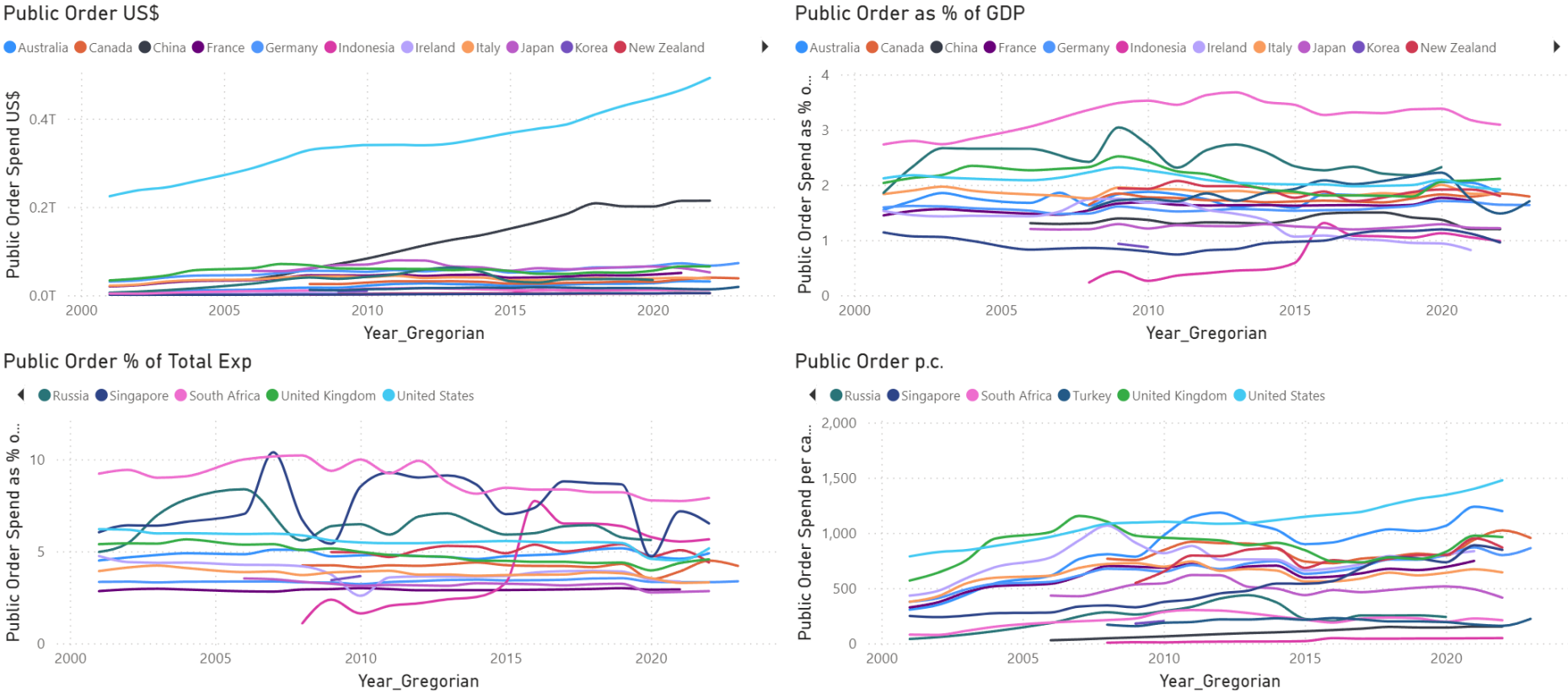
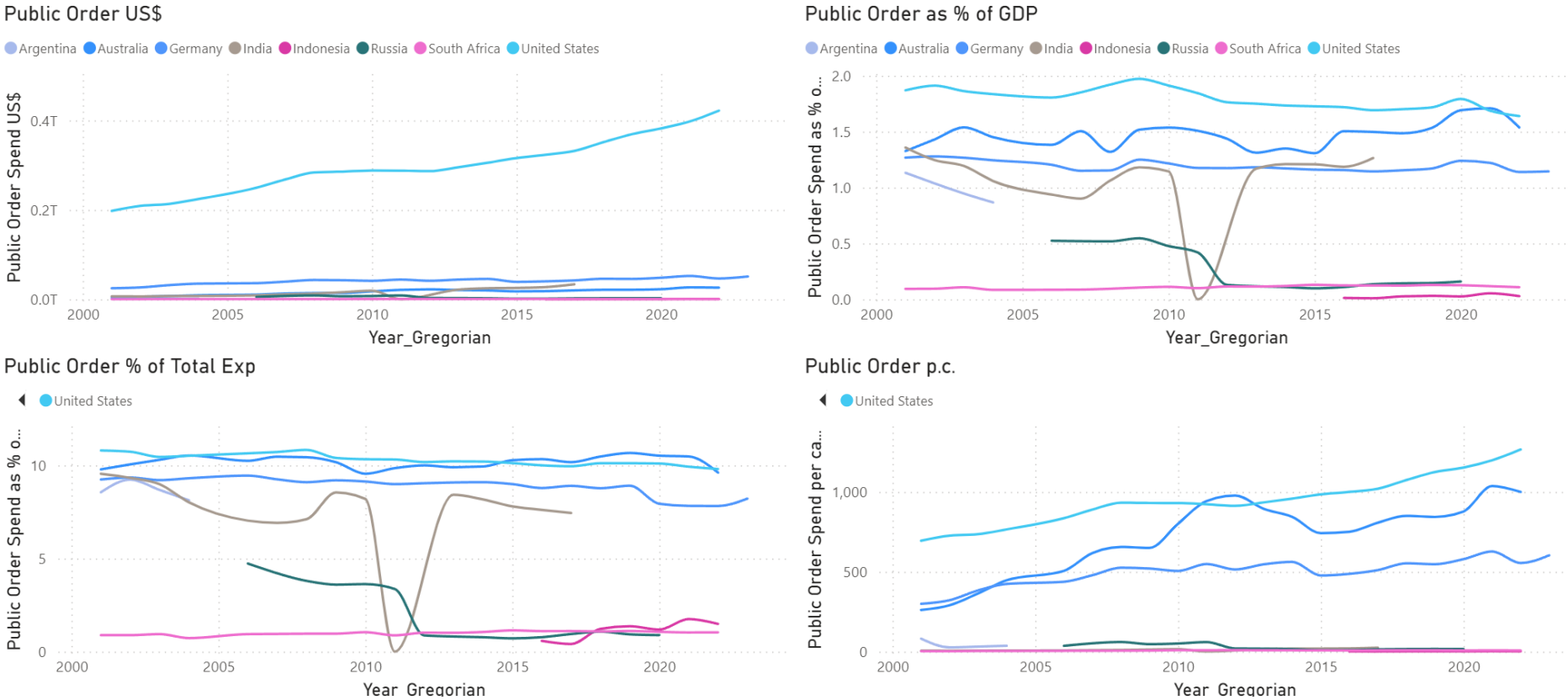


Figure 105. Key Functions: State Government Public Order and Safety: G20+5



Education

Figure 106. Key Functions: General Government - Education FTM Losses

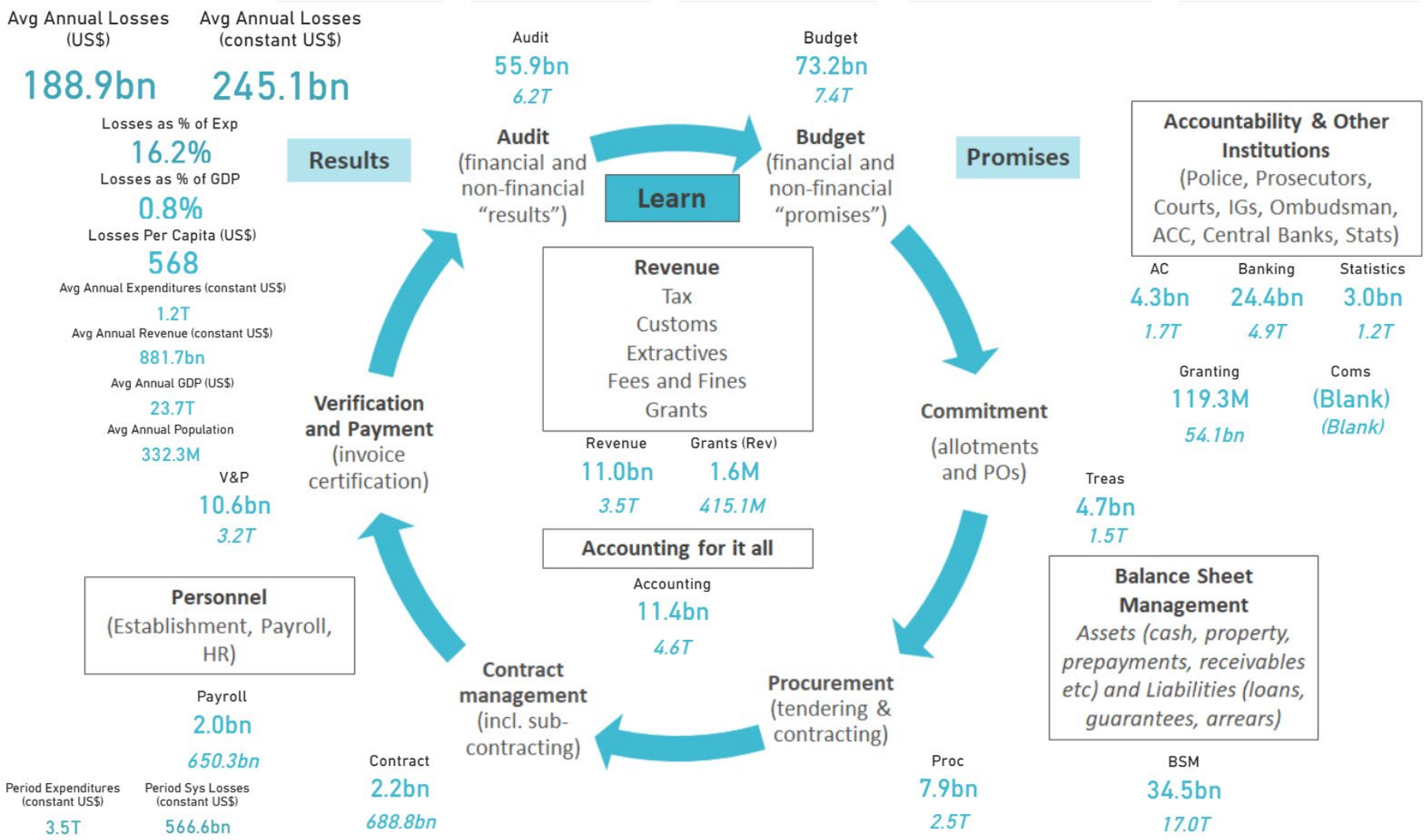


Figure 107. Key Functions: GG Education

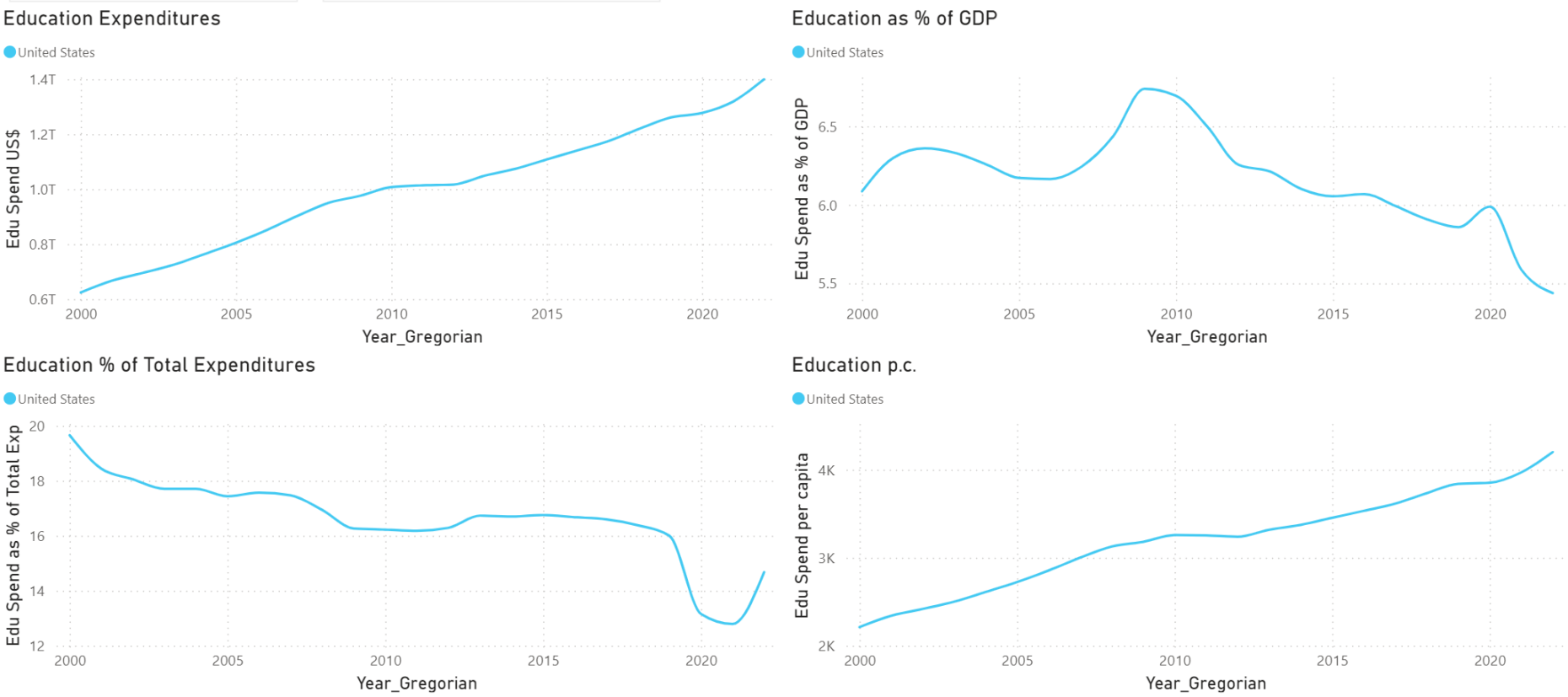


Figure 108. Key Functions: State Government Education

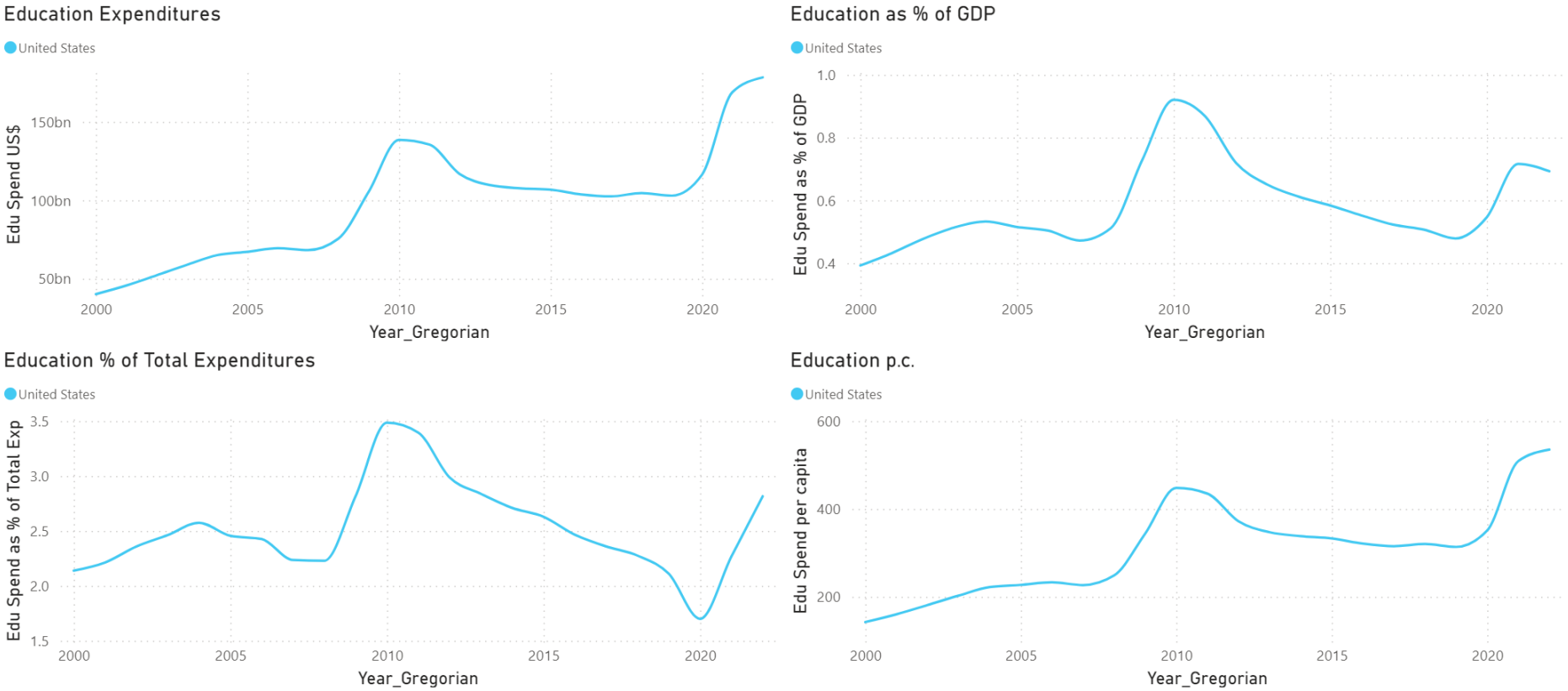


Figure 109. Key Functions: GG Education: G20+5

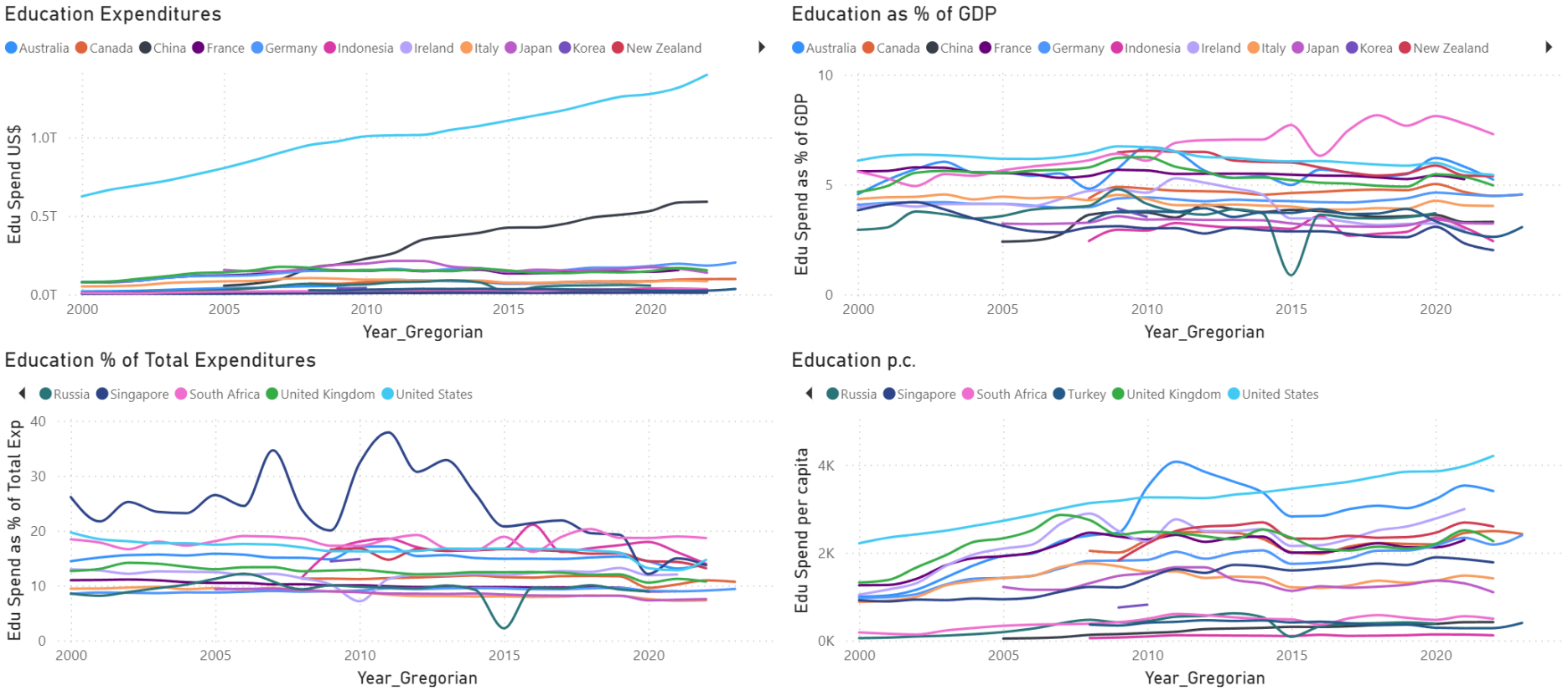


Figure 110. Non-Financial Performance Outcome Metrics: Education – Participation

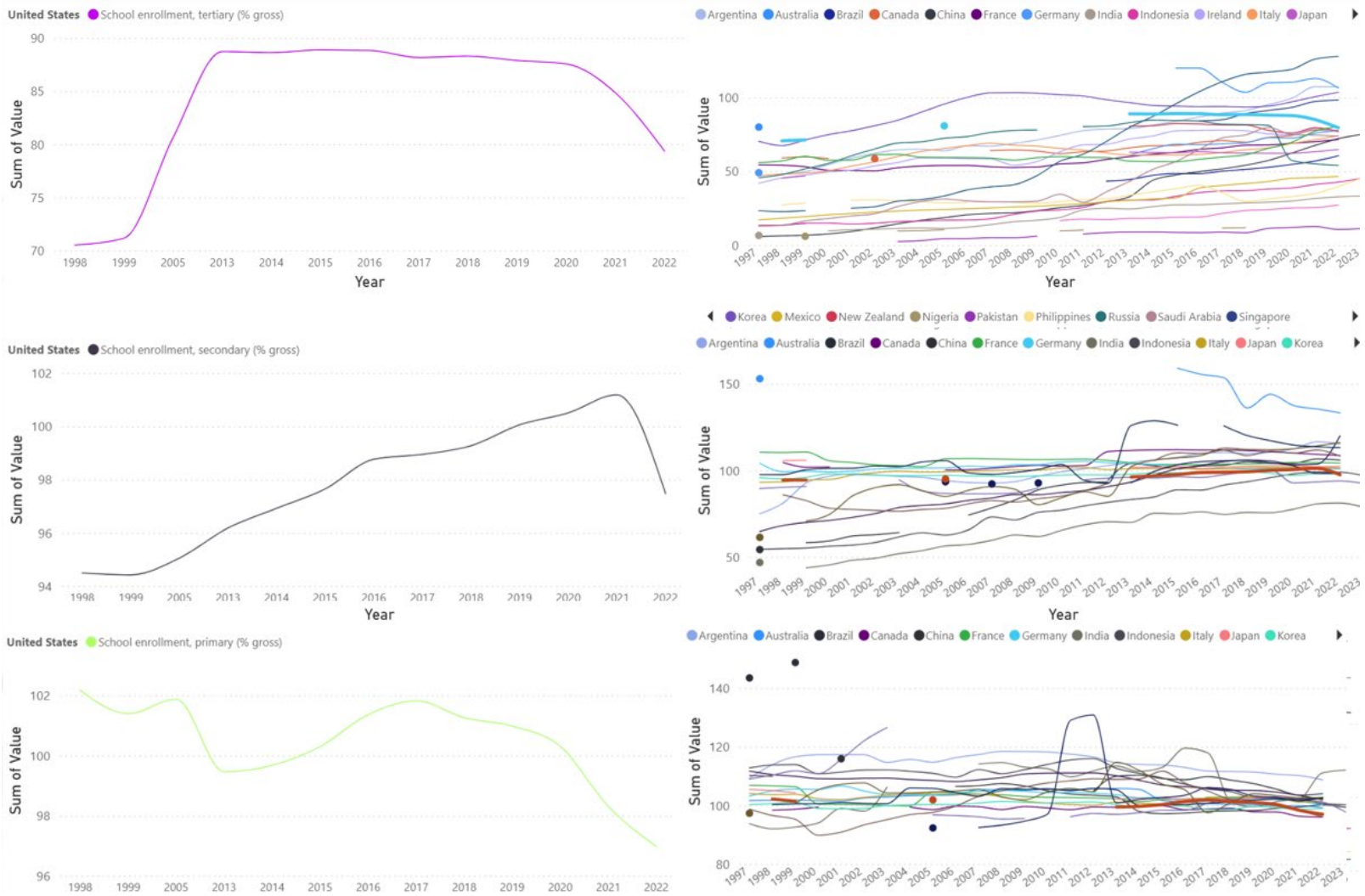


Figure 111. Non-Financial Performance Outcome Metrics: Education – Outcomes

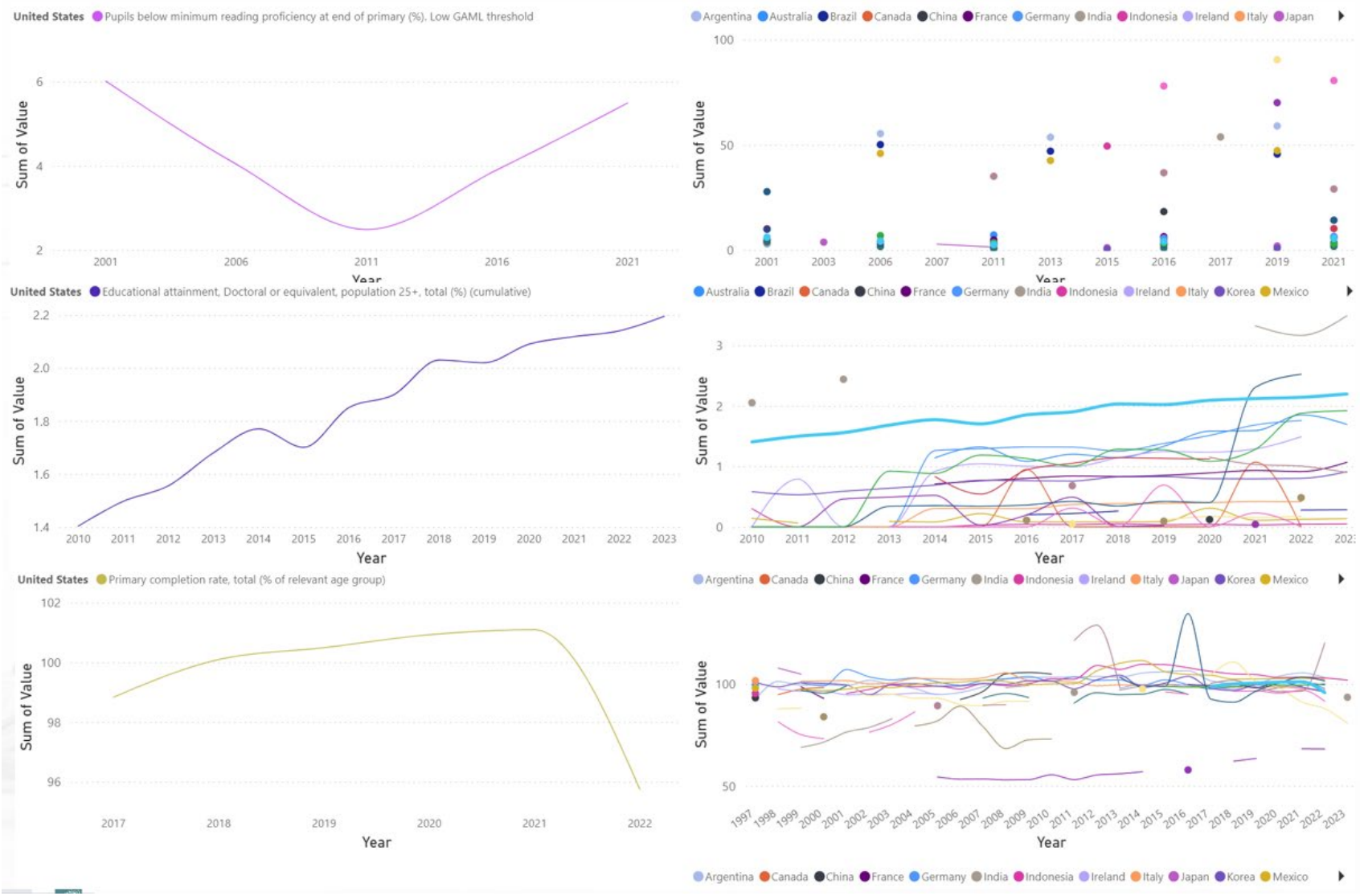


Figure 112. Non-Financial Performance Outcome Metrics: Education – Inputs and Efficiency

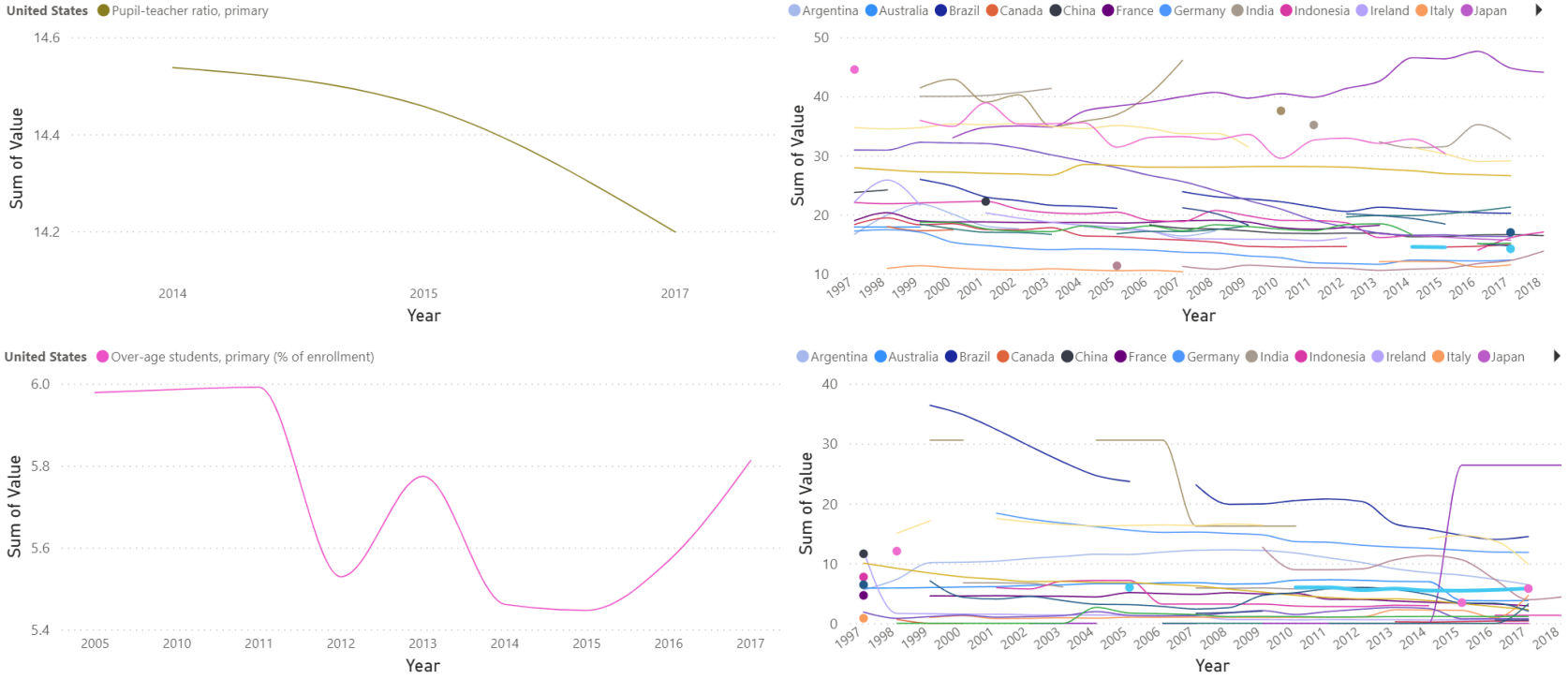


Figure 113. Non-Financial Performance Outcome Metrics: Education – $ per Primary Teacher and Student

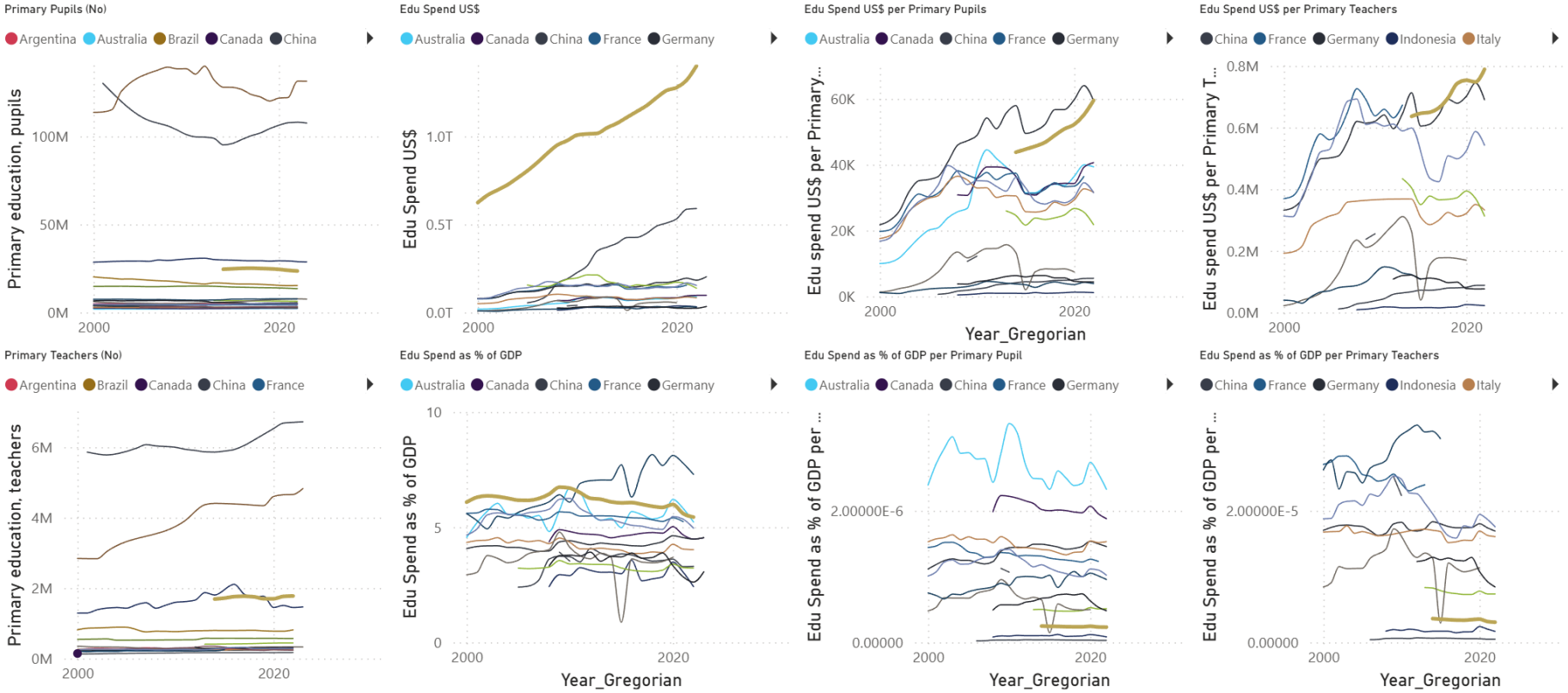


Figure 114. Non-Financial Performance Outcome Metrics: Education – $ per Secondary Teacher and Student

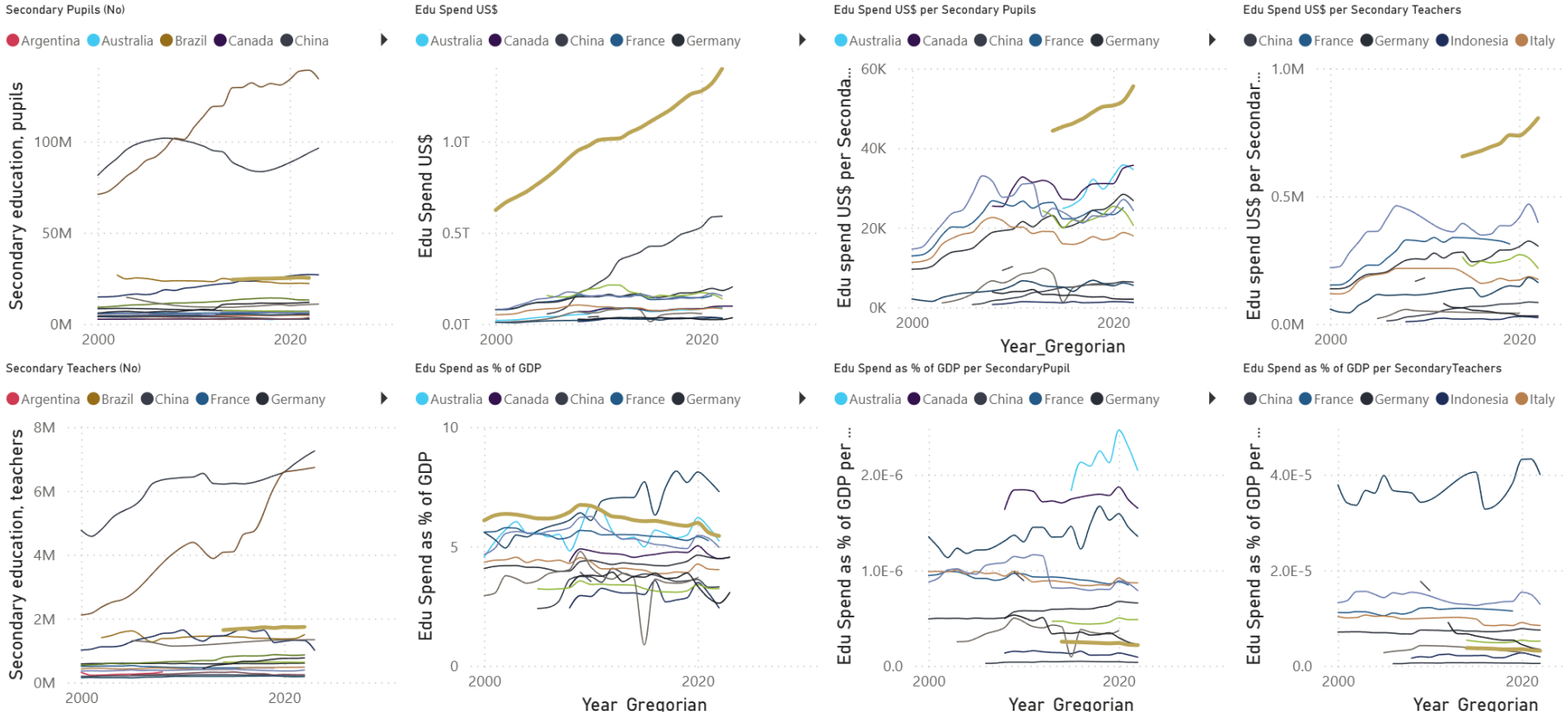
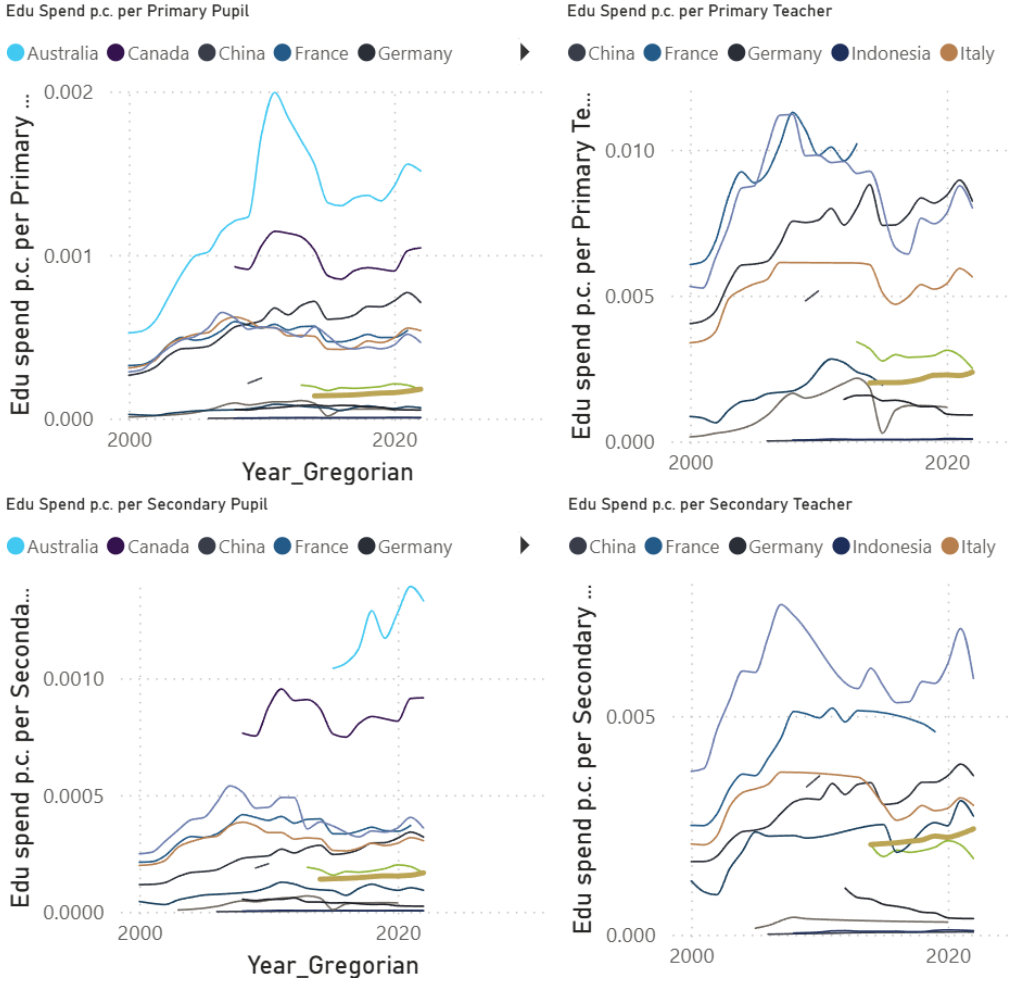


Figure 115. Non-Financial Performance Outcome Metrics: Education – $ Per Capita Secondary Teacher and Student



Health

Figure 116. Key Functions: General Government - Health FTM Losses

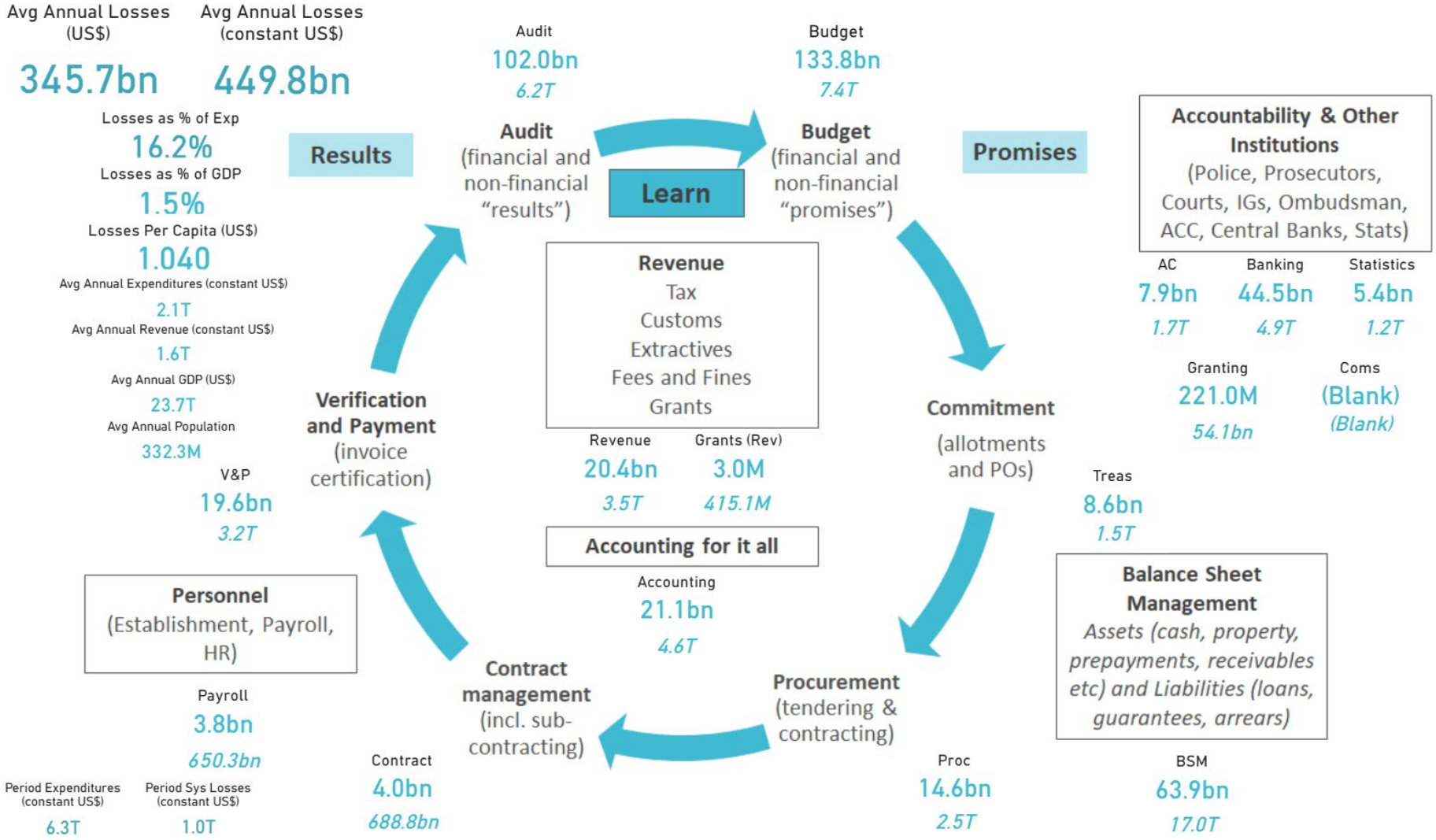


Figure 117. Key Functions: GG Health

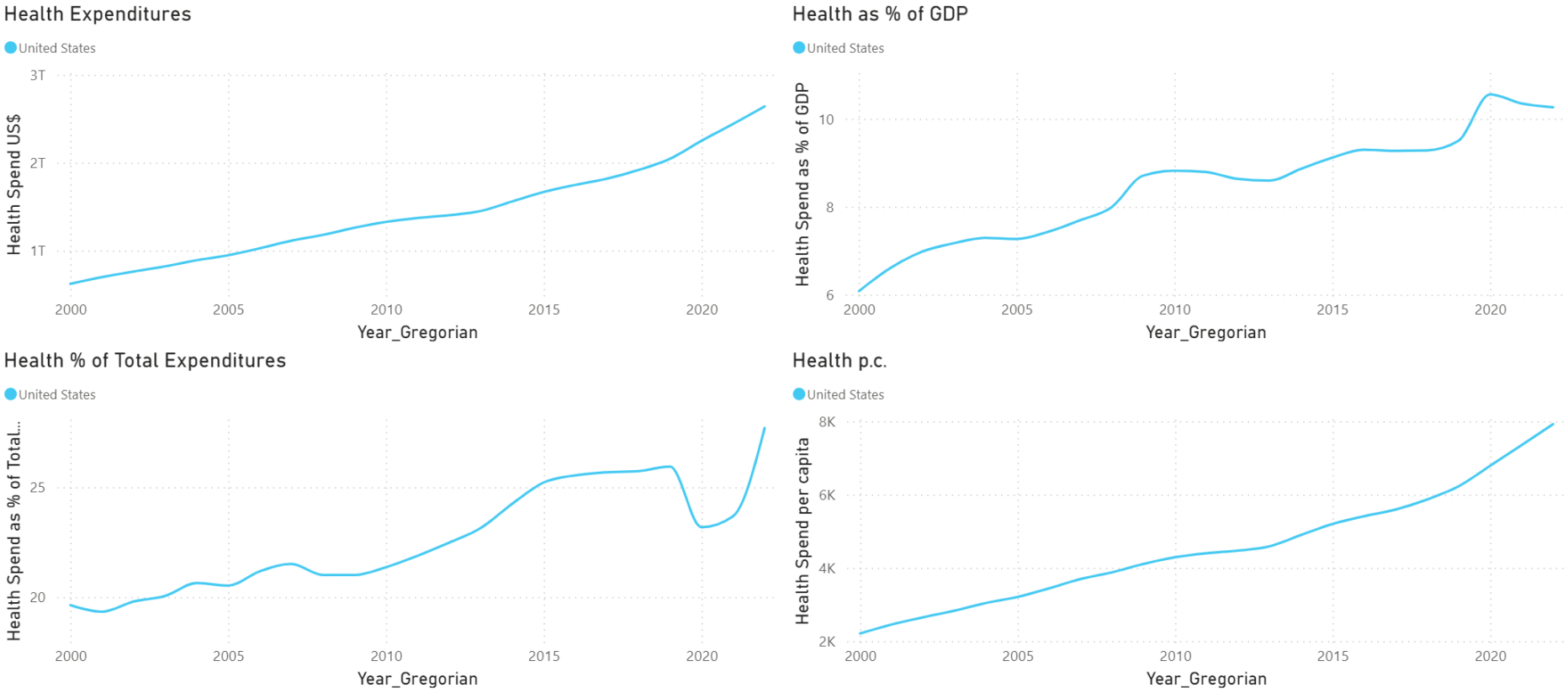


Figure 118. Key Functions: State Government Health

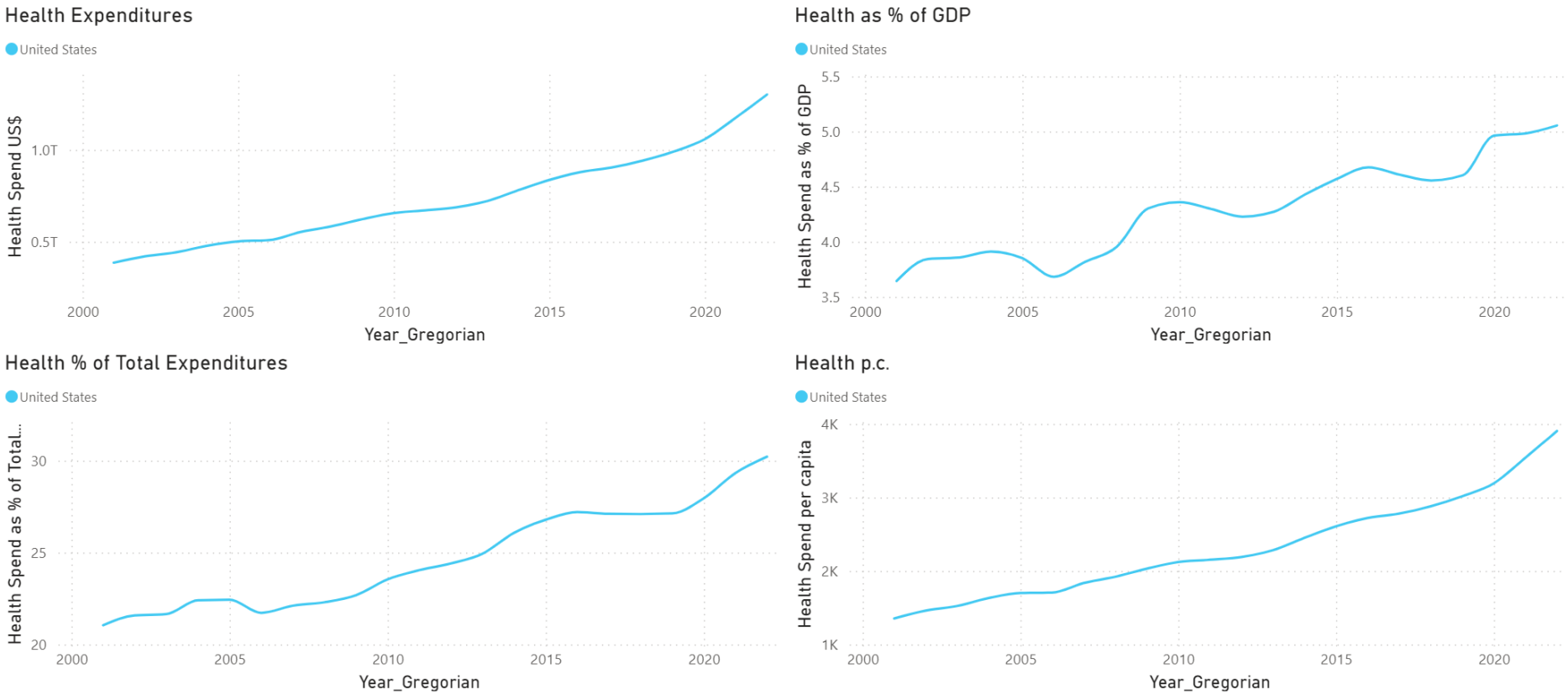


Figure 119. Key Functions: GG Health: G20+5

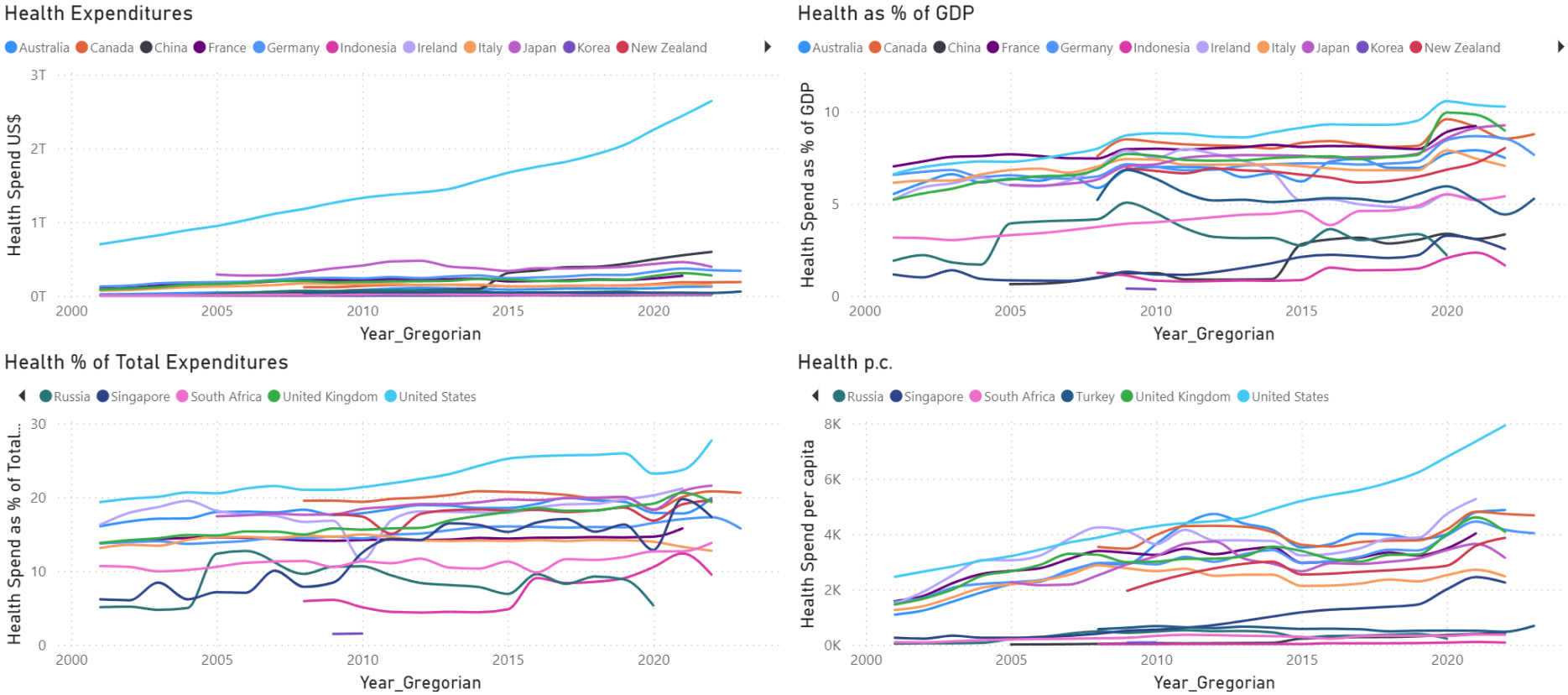


Figure 120. Non-Financial Performance Outcome Metrics: Health – Maternal Mortality and Universal Health Coverage

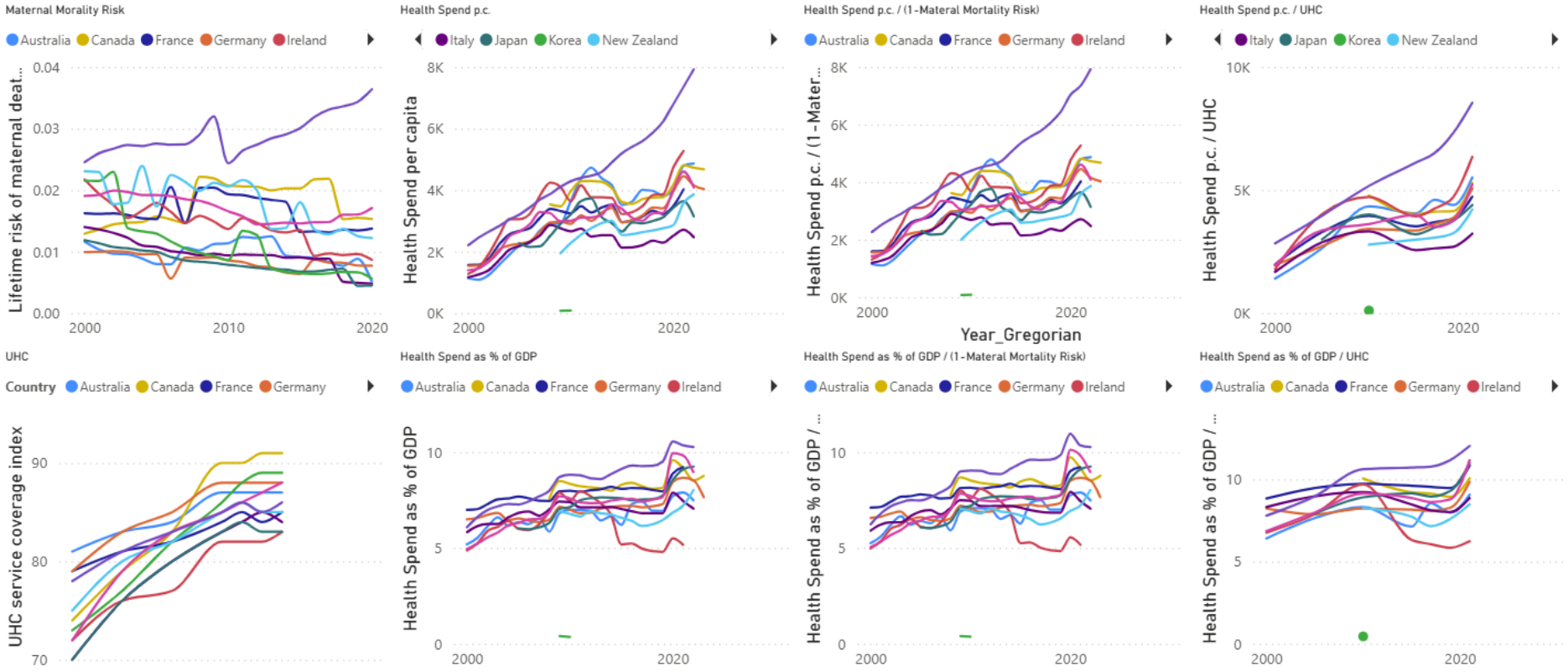


Figure 121. Non-Financial Performance Outcome Metrics: Health – No. of Beds and Life Expectancy

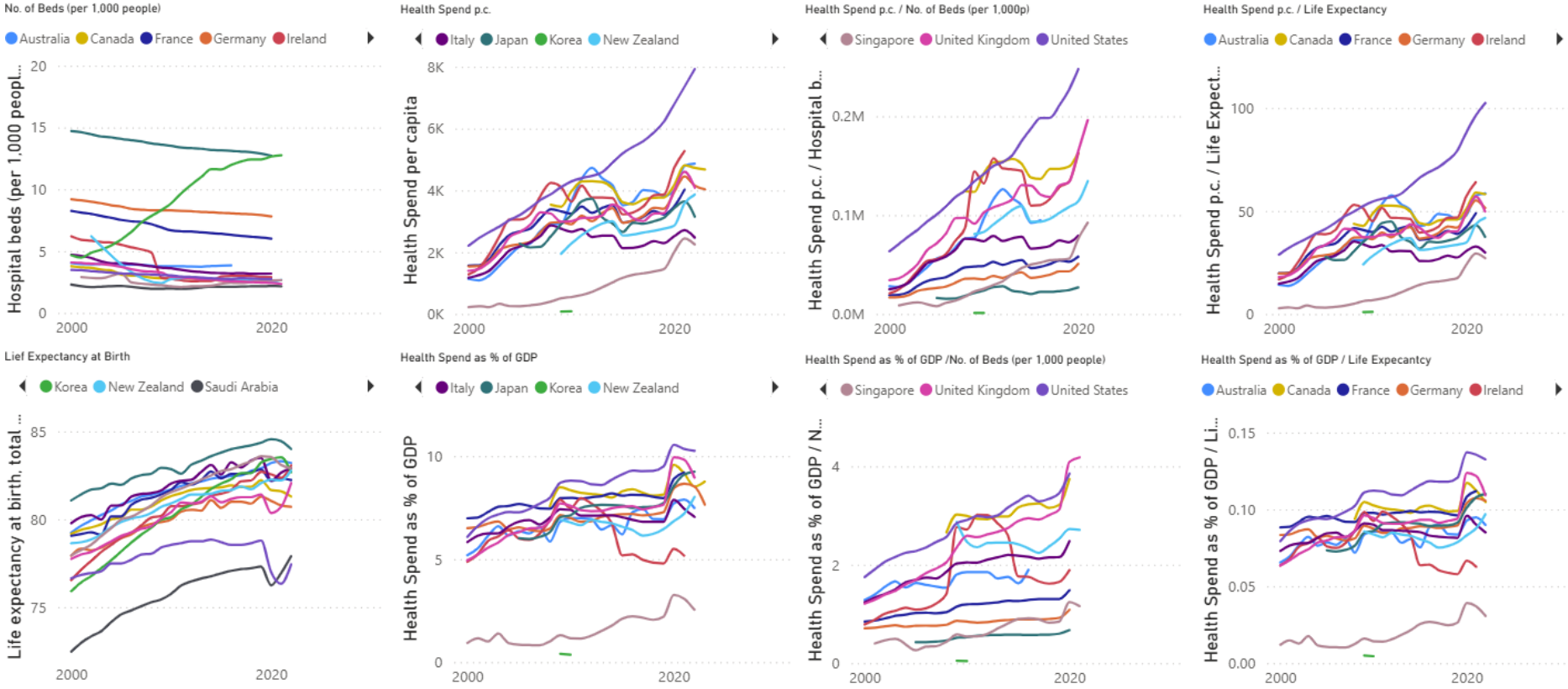
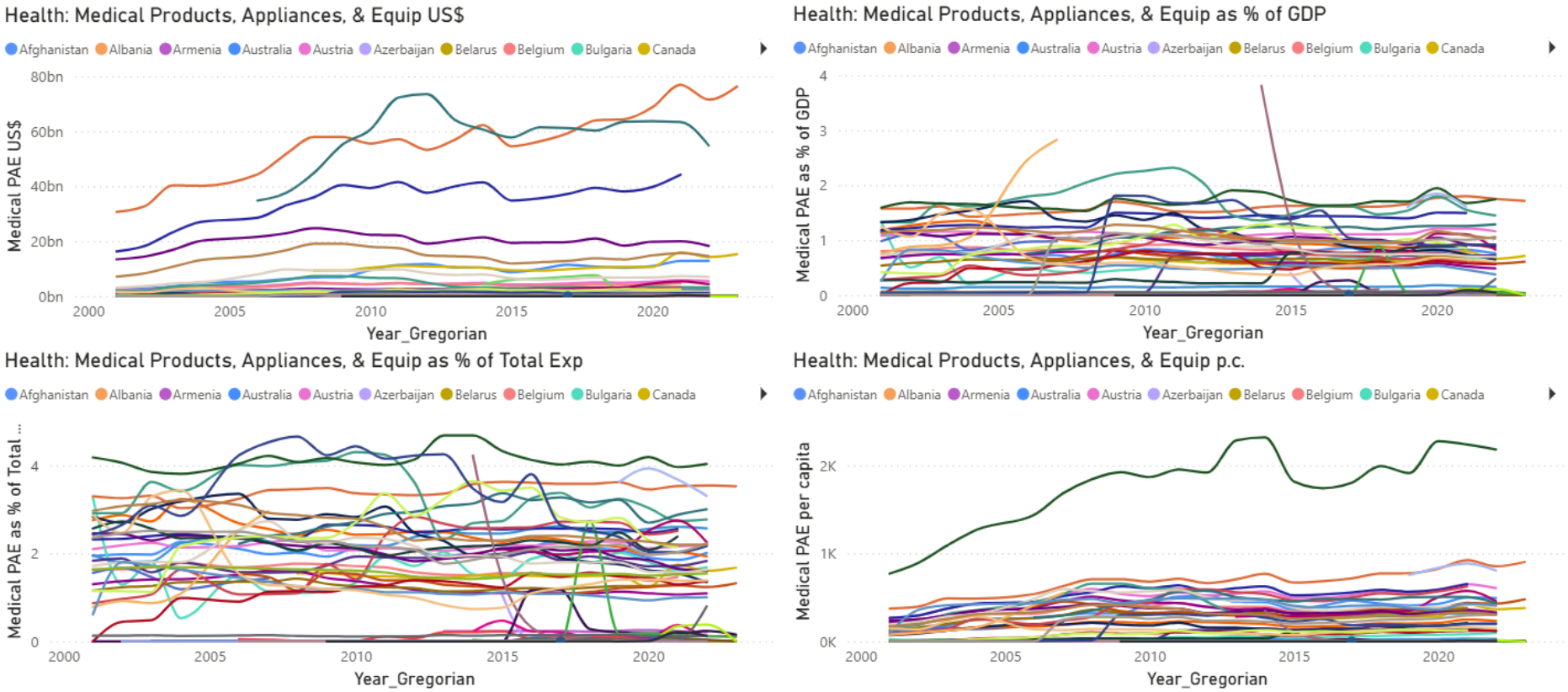


Figure 122. Non-Financial Performance Outcome Metrics: Health – Medical Products, Appliances and Equipment



Agriculture

Figure 123. Key Functions: GG Agriculture: G20+5

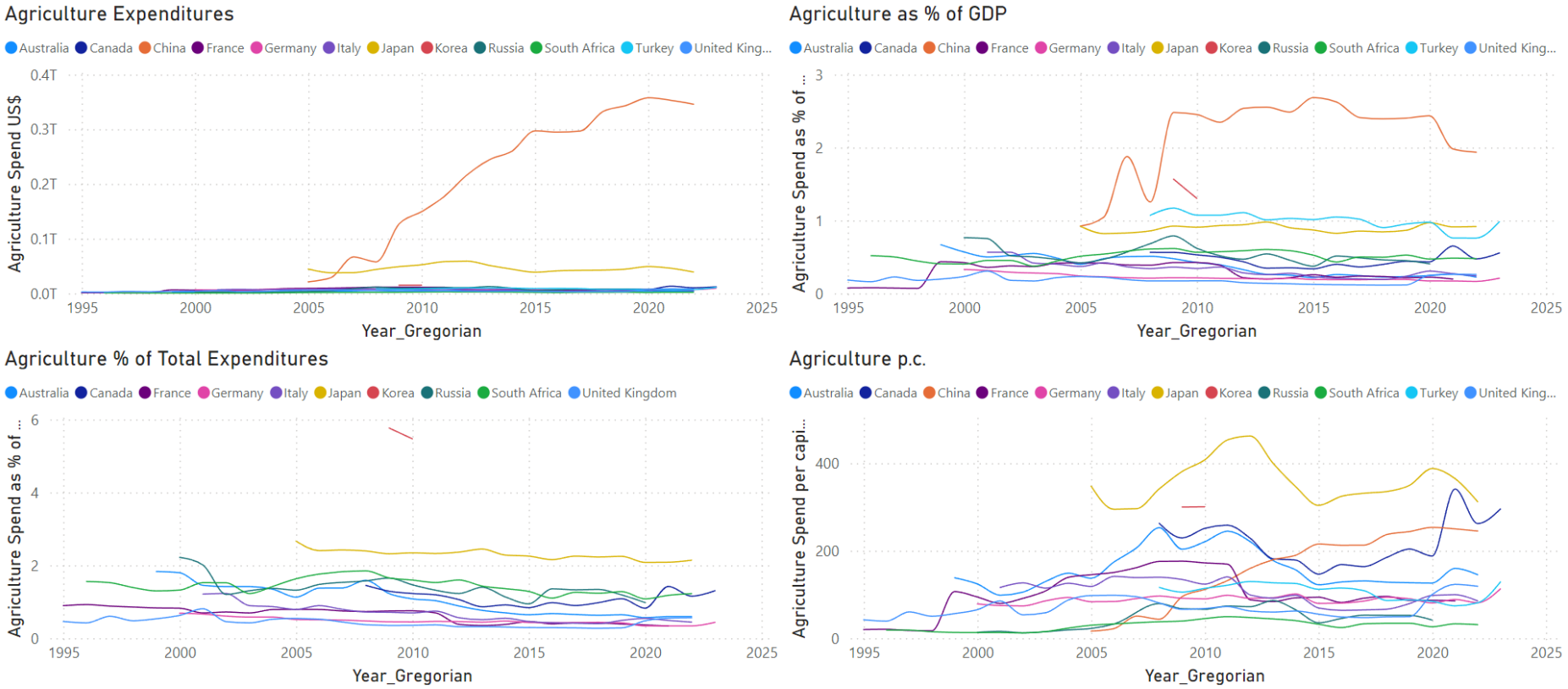


Figure 124. Non-Financial Performance Outcome Metrics: Agriculture – Arable land (% of land area)

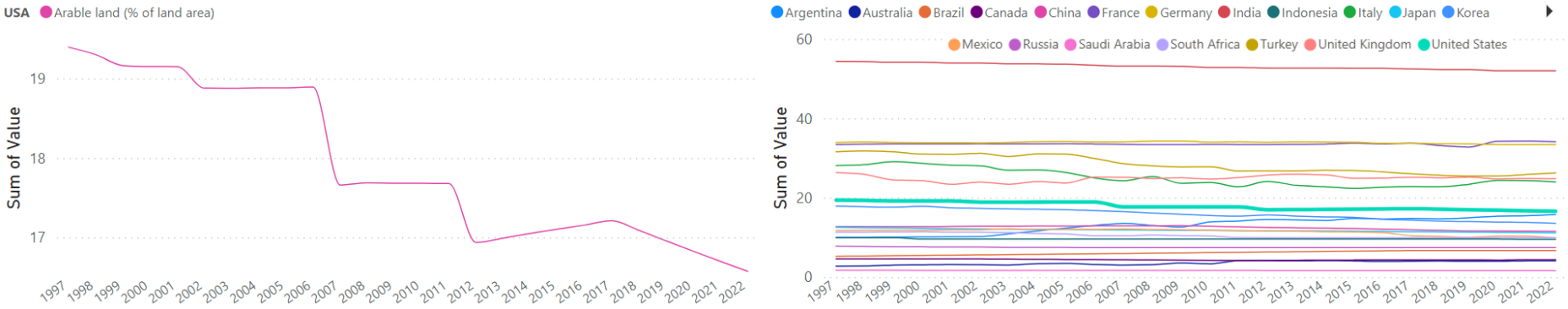


Figure 125. Non-Financial Performance Outcome Metrics: Agriculture – Cereal Yield (kg/h)

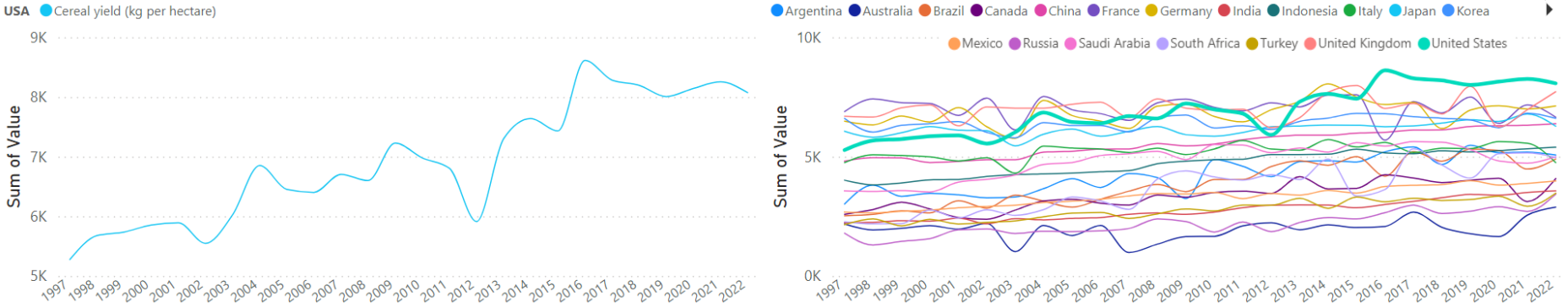


Figure 126. Non-Financial Performance Outcome Metrics: Agriculture – Cereal Production (MT)

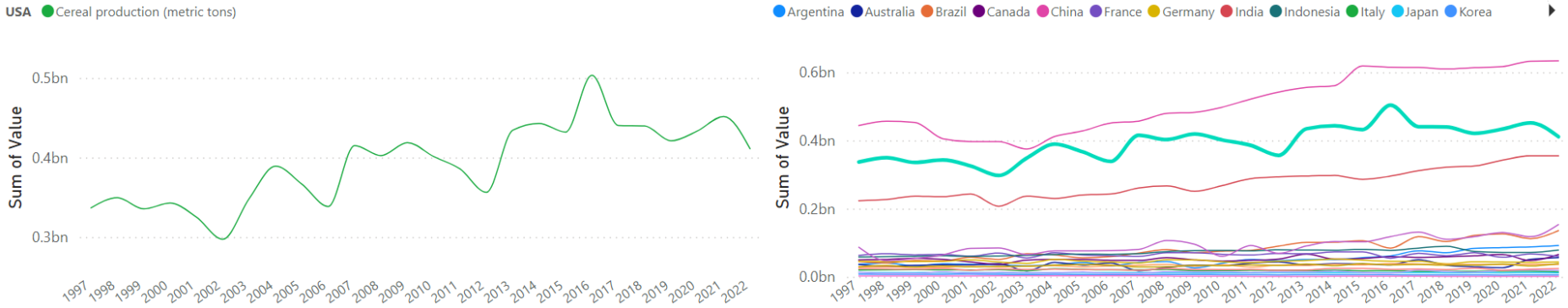


Figure 127. Non-Financial Performance Outcome Metrics: Agriculture – Capture Fisheries Production (MT)

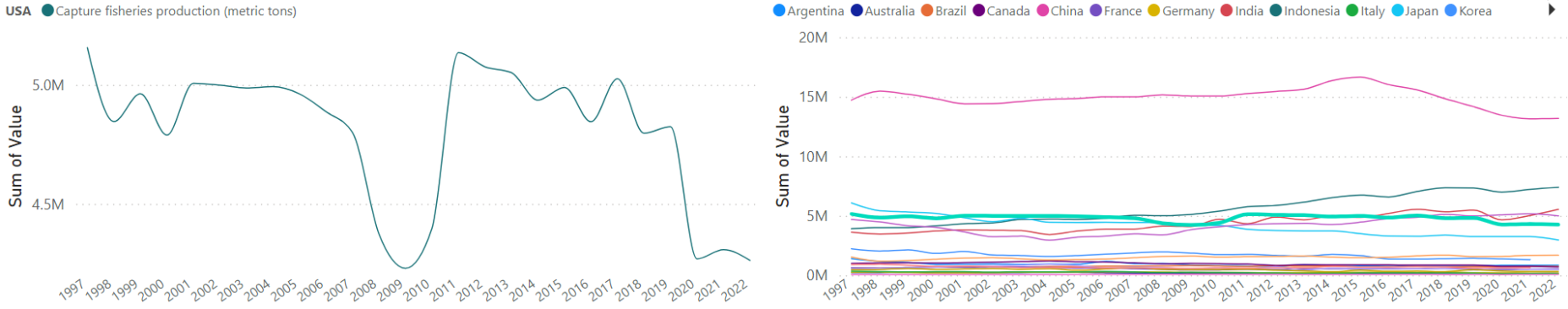


Figure 128. Non-Financial Performance Outcome Metrics: Agriculture – Aquaculture Production (MT)

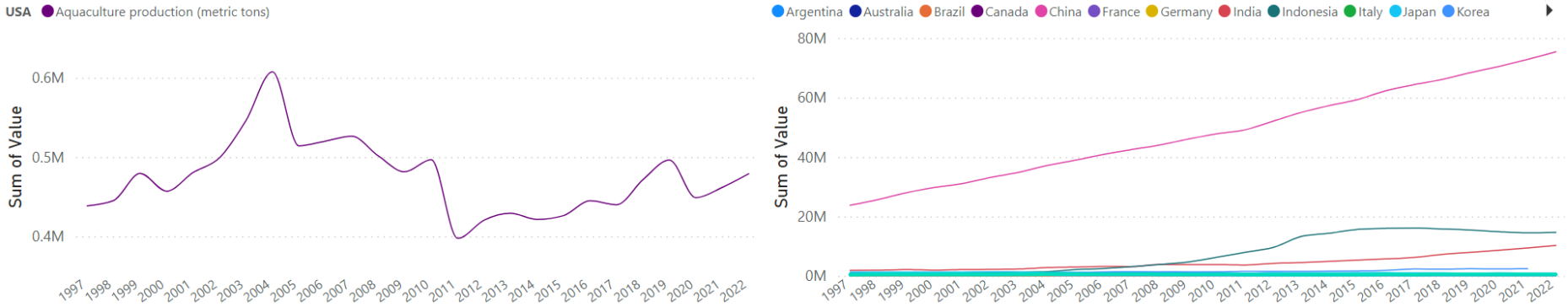


Figure 129. Non-Financial Performance Outcome Metrics: Agriculture – Food Production Index (2014-2016 = 100)

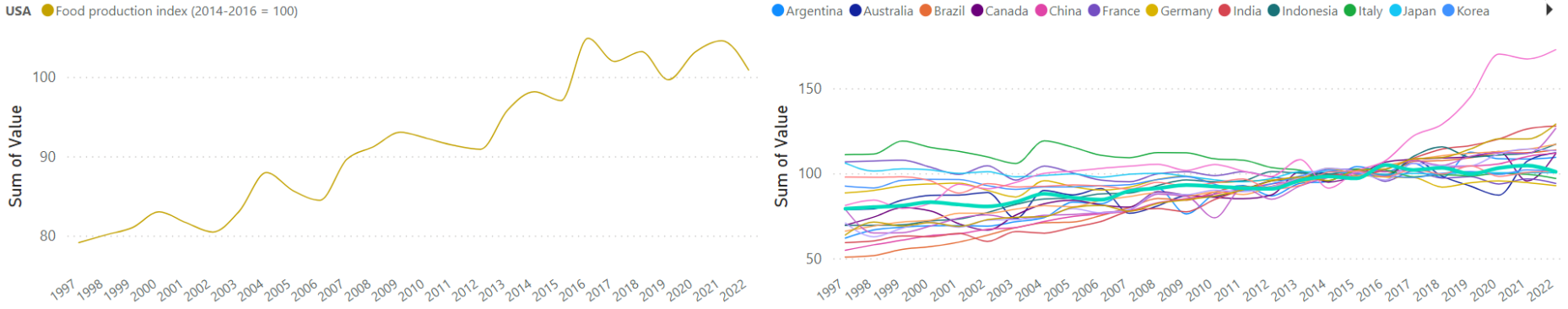


Figure 130. Non-Financial Performance Outcome Metrics: Agriculture – Crop Production Index (2014-2016 = 100)

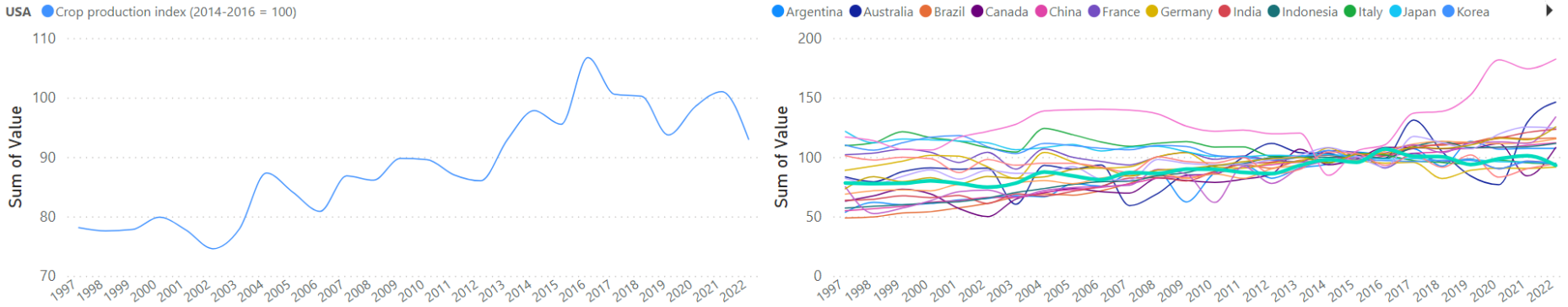
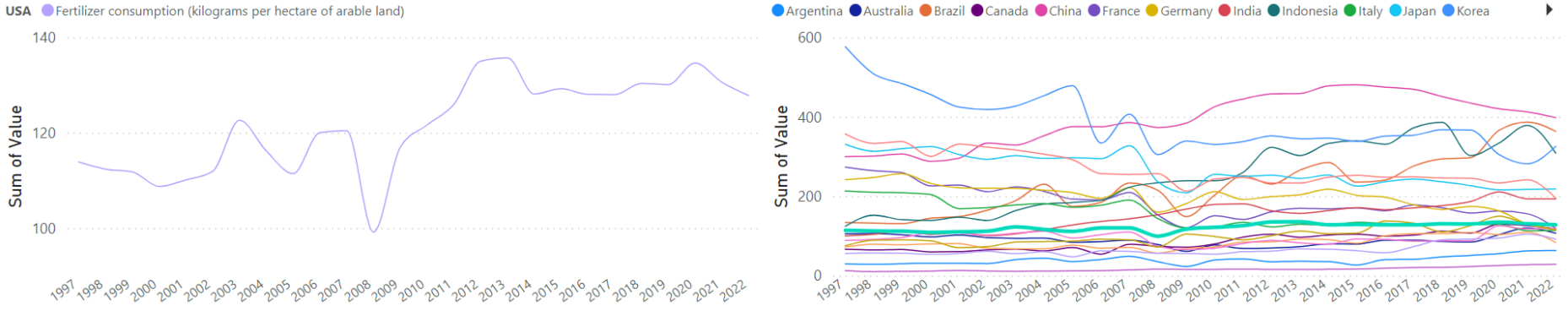


Figure 131. Non-Financial Performance Outcome Metrics: Agriculture – Fertilizer consumption (kg/h of arable land)



Key Inputs (by Economic Classification)

Figure 132. US GG GFS Financial Statements 2011-2023

2011 Code Level Up Code Name	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
1 REVENUE	**4,536,463,800,000**	**4,731,356,700,000**	**5,270,418,000,000**	**5,510,979,000,000**	**5,763,187,900,000**	**5,825,138,400,000**	**6,212,055,100,000**	**6,185,947,800,000**	**6,436,911,100,000**	**6,513,062,700,000**	**7,509,008,800,000**	**8,588,158,300,000**	**8,274,199,000,000**
11 Taxes	2,859,539,400,000	3,006,932,900,000	3,259,756,600,000	3,463,575,800,000	3,647,218,500,000	3,682,252,500,000	3,984,021,500,000	3,870,180,000,000	4,063,924,100,000	4,118,415,500,000	4,921,122,500,000	5,734,181,600,000	5,435,579,400,000
12 Social contributions	921,061,100,000	955,160,000,000	1,109,439,900,000	1,158,800,900,000	1,210,015,100,000	1,244,366,100,000	1,304,155,400,000	1,367,037,900,000	1,430,159,000,000	1,455,040,200,000	1,565,296,700,000	1,710,729,900,000	1,822,649,300,000
13 Grants	935,700,000	891,700,000	968,000,000	1,119,700,000	683,400,000	822,400,000	799,000,000	720,500,000	1,282,100,000	742,100,000	1,104,900,000	816,700,000	754,600,000
14 Other revenue	754,927,600,000	768,372,100,000	900,253,500,000	887,482,600,000	905,270,900,000	897,697,400,000	923,079,200,000	948,009,400,000	941,545,900,000	938,864,900,000	1,021,484,700,000	1,142,430,100,000	1,015,215,700,000
2 EXPENSE	**6,098,183,400,000**	**6,105,362,800,000**	**6,162,817,000,000**	**6,337,257,700,000**	**6,527,330,400,000**	**6,722,695,100,000**	**6,938,557,300,000**	**7,280,786,400,000**	**7,691,615,100,000**	**9,494,852,200,000**	**10,138,329,500,000**	**9,499,432,200,000**	**10,157,321,000,000**
21 Compensation of employees	1,525,877,900,000	1,528,139,600,000	1,568,827,500,000	1,607,404,600,000	1,654,744,500,000	1,692,417,200,000	1,735,786,000,000	1,806,615,700,000	1,859,532,700,000	1,927,900,700,000	1,988,612,700,000	2,044,588,000,000	2,165,690,600,000
22 Use of goods and services	962,324,800,000	953,180,900,000	932,874,100,000	933,682,900,000	941,364,200,000	965,608,700,000	992,651,700,000	1,064,718,200,000	1,163,637,300,000	1,230,084,300,000	1,384,733,600,000	1,550,932,100,000	1,533,540,200,000
23 Consumption of fixed capital	416,406,600,000	429,965,400,000	439,009,500,000	449,922,700,000	454,729,400,000	460,250,600,000	474,461,000,000	495,700,100,000	514,203,200,000	532,678,500,000	567,657,700,000	626,807,800,000	663,274,400,000
24 Interest	449,254,200,000	443,131,100,000	419,435,500,000	435,646,100,000	428,286,400,000	468,185,500,000	494,638,400,000	571,995,600,000	606,868,900,000	541,833,700,000	632,098,100,000	815,889,500,000	997,911,900,000
25 Subsidies	60,007,600,000	58,037,300,000	59,720,000,000	58,089,600,000	57,191,800,000	61,747,900,000	59,874,600,000	63,319,900,000	72,956,400,000	698,509,400,000	609,867,000,000	127,997,700,000	102,807,600,000
26 Grants	59,217,100,000	56,408,900,000	54,686,500,000	52,689,700,000	53,129,500,000	55,281,300,000	53,156,700,000	59,341,700,000	57,238,900,000	59,935,500,000	73,869,900,000	102,272,900,000	96,975,500,000
27 Social benefits	2,327,456,200,000	2,340,536,900,000	2,404,772,700,000	2,518,136,400,000	2,655,548,000,000	2,738,215,000,000	2,829,233,500,000	2,948,745,000,000	3,114,746,600,000	3,939,215,500,000	4,004,739,300,000	4,025,017,400,000	4,177,286,200,000
28 Other expense	297,639,000,000	295,962,700,000	283,491,200,000	281,685,700,000	282,336,600,000	280,988,900,000	298,755,400,000	270,350,200,000	302,431,100,000	564,694,600,000	876,751,200,000	205,926,800,000	419,834,600,000
3 NET TRANSACTIONS IN ASSETS AND LIABILITIES	**166,997,100,000**	**136,376,400,000**	**104,904,700,000**	**95,450,700,000**	**85,356,700,000**	**121,053,100,000**	**141,839,400,000**	**169,184,000,000**	**189,602,500,000**	**212,904,300,000**	**169,779,000,000**	**38,087,800,000**	**223,017,400,000**
31 Net/gross investment in nonfinancial assets	166,997,100,000	136,376,400,000	104,904,700,000	95,450,700,000	85,356,700,000	121,053,100,000	141,839,400,000	169,184,000,000	189,602,500,000	212,904,300,000	169,779,000,000	38,087,800,000	223,017,400,000

Compensation for Employees

Figure 133. US GG Key Inputs: Compensation for Employees

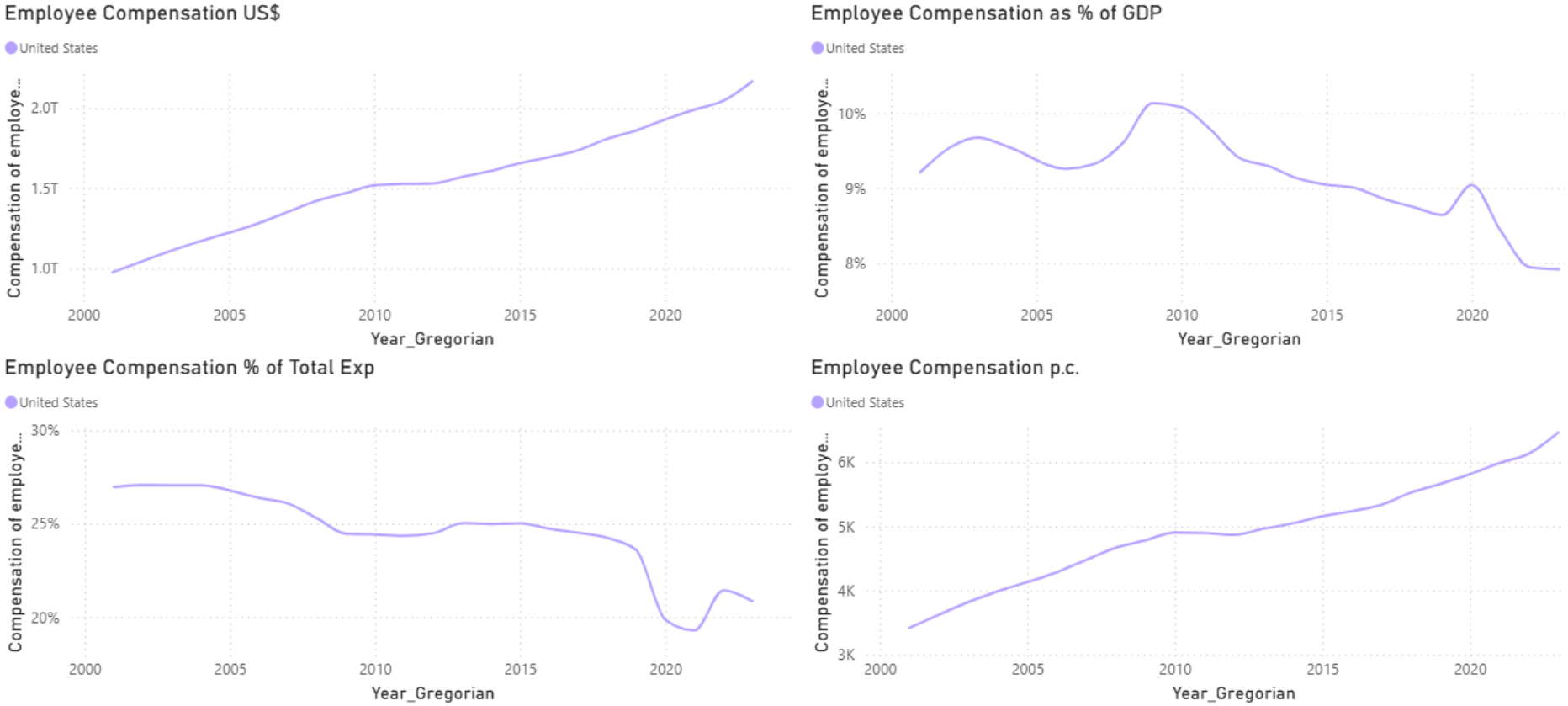


Figure 134. US GG Key Inputs: Compensation for Employees: G20+5

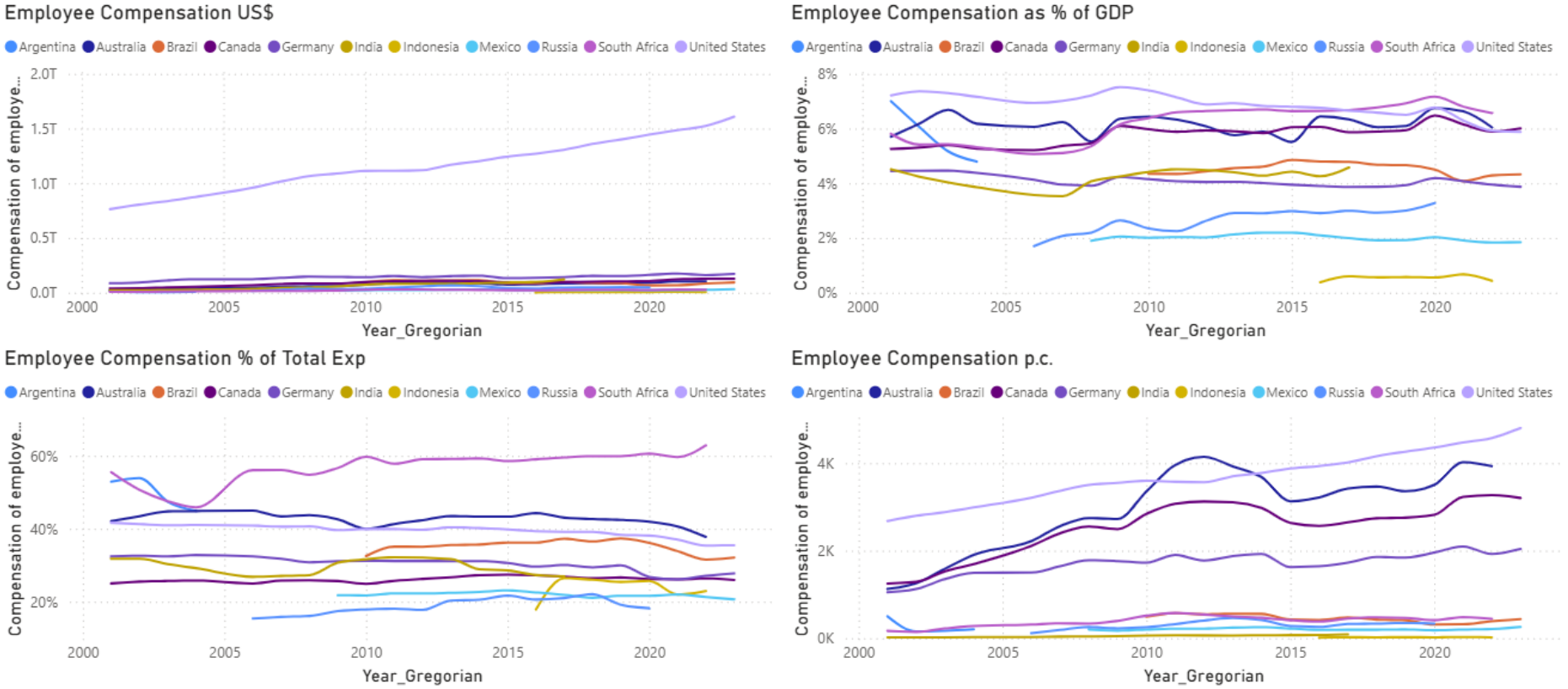
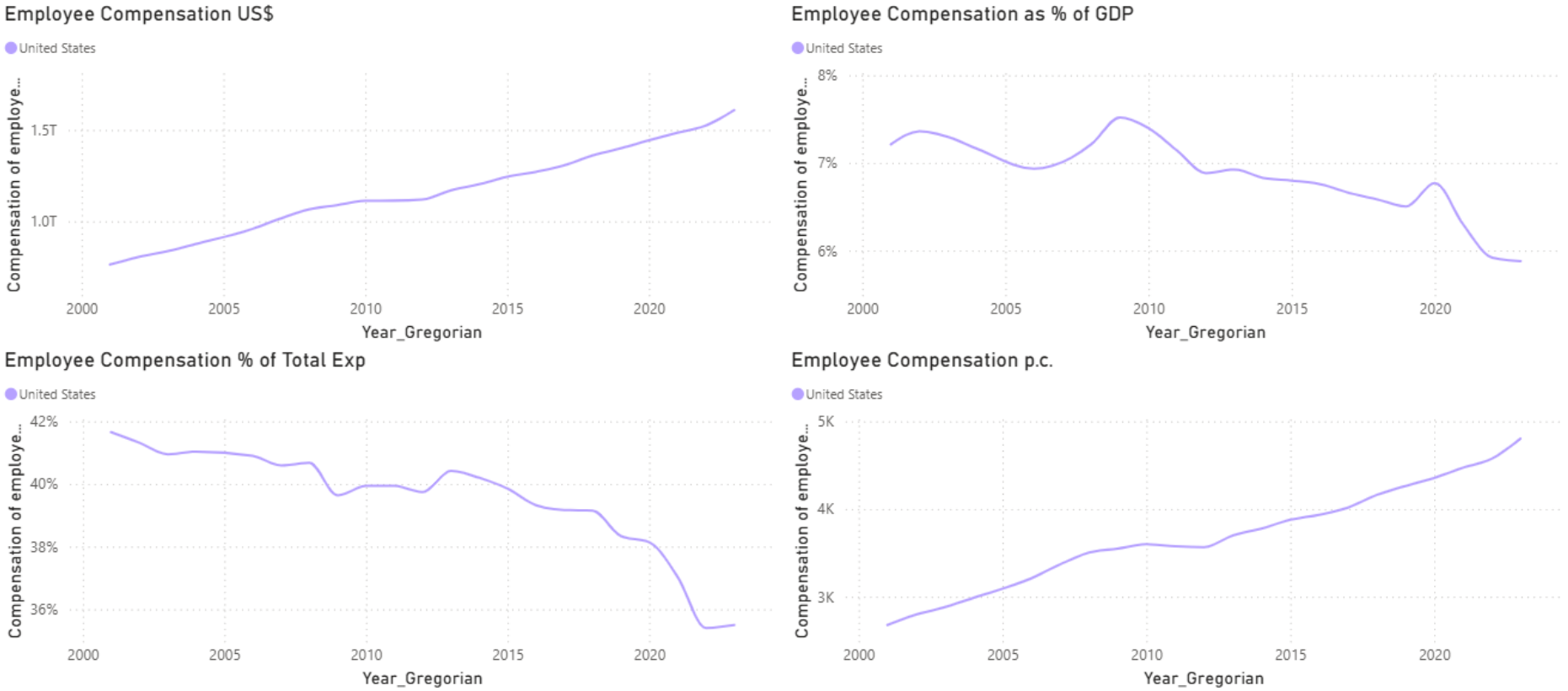


Figure 135. US State Government Key Inputs: Compensation for Employees



Subsidies for Companies

Figure 136. US GG Key Inputs: Subsidies for Companies

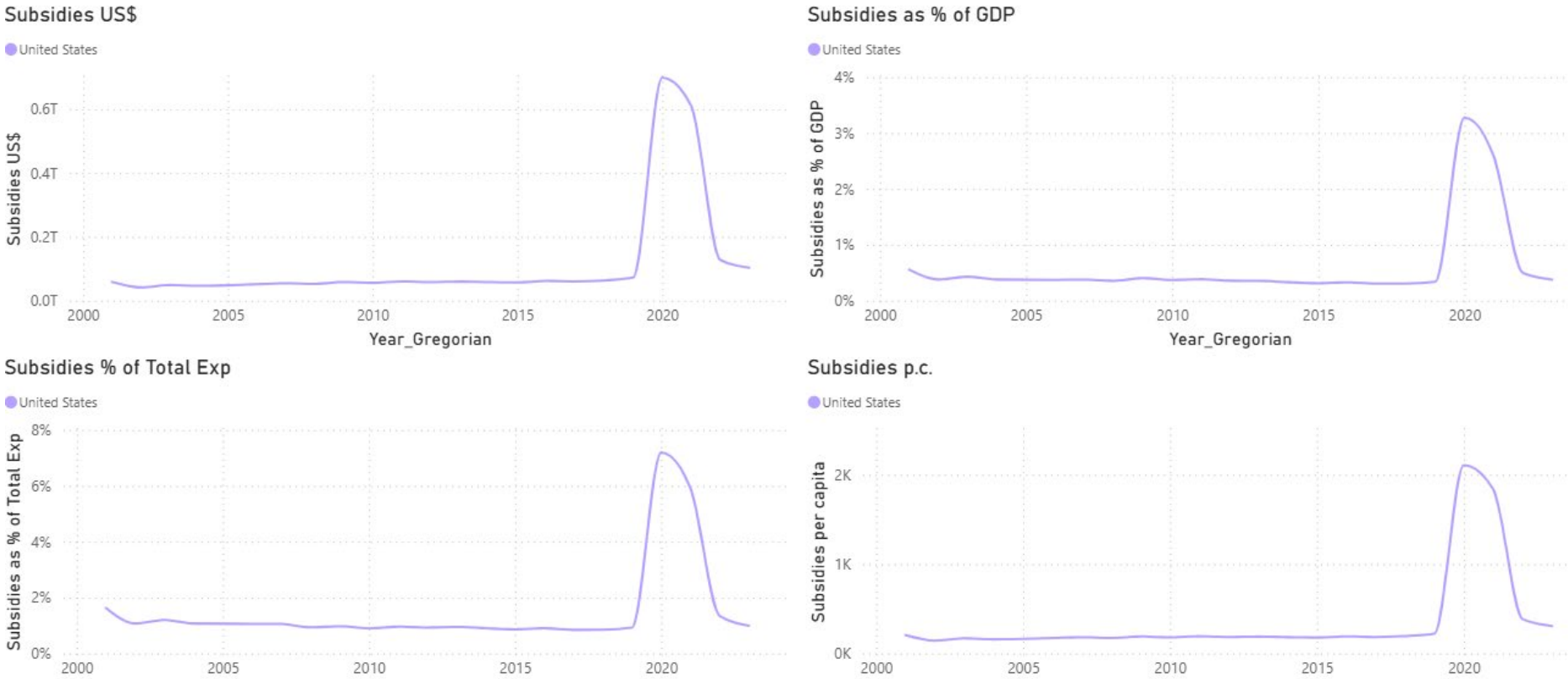


Figure 137. US State Government Key Inputs: Subsidies for Companies

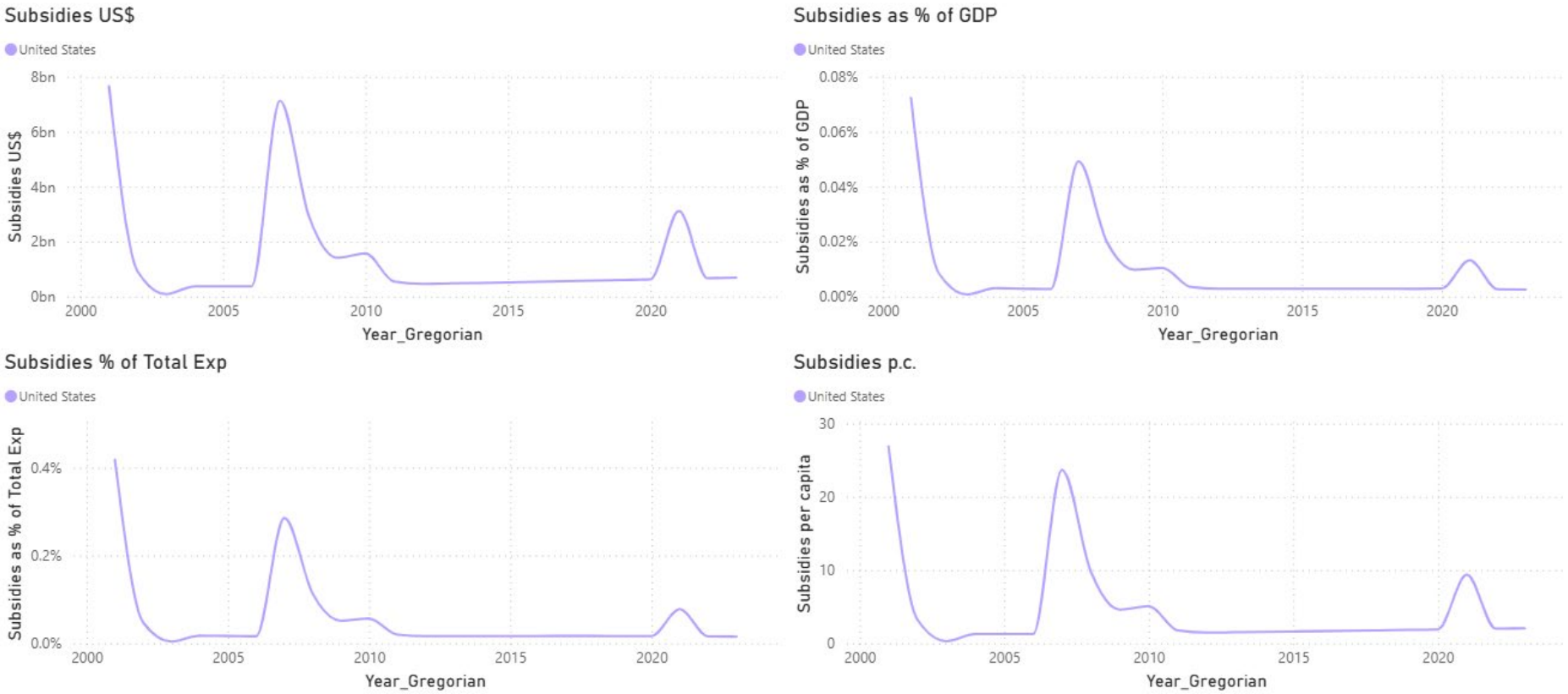


Figure 138. US GG Key Inputs: Subsidies for Companies: G20+5

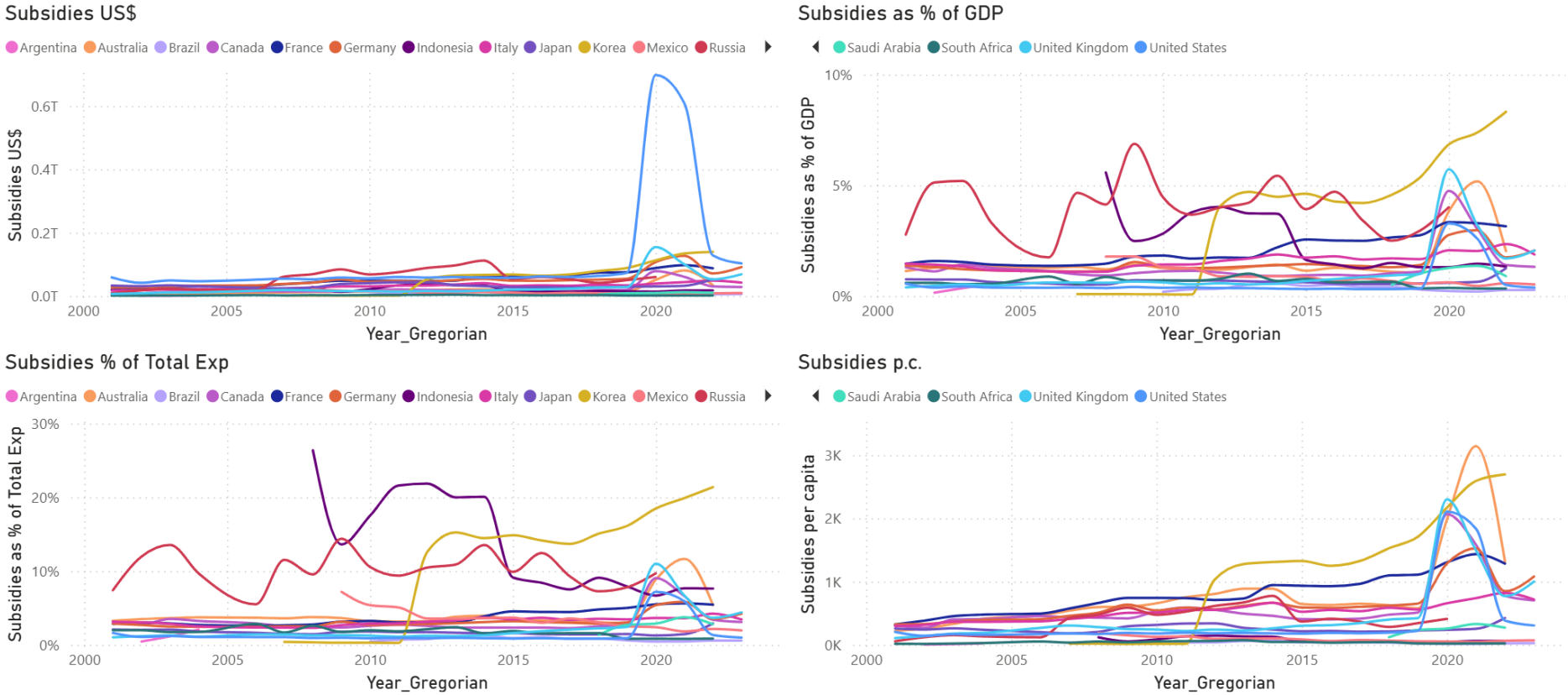
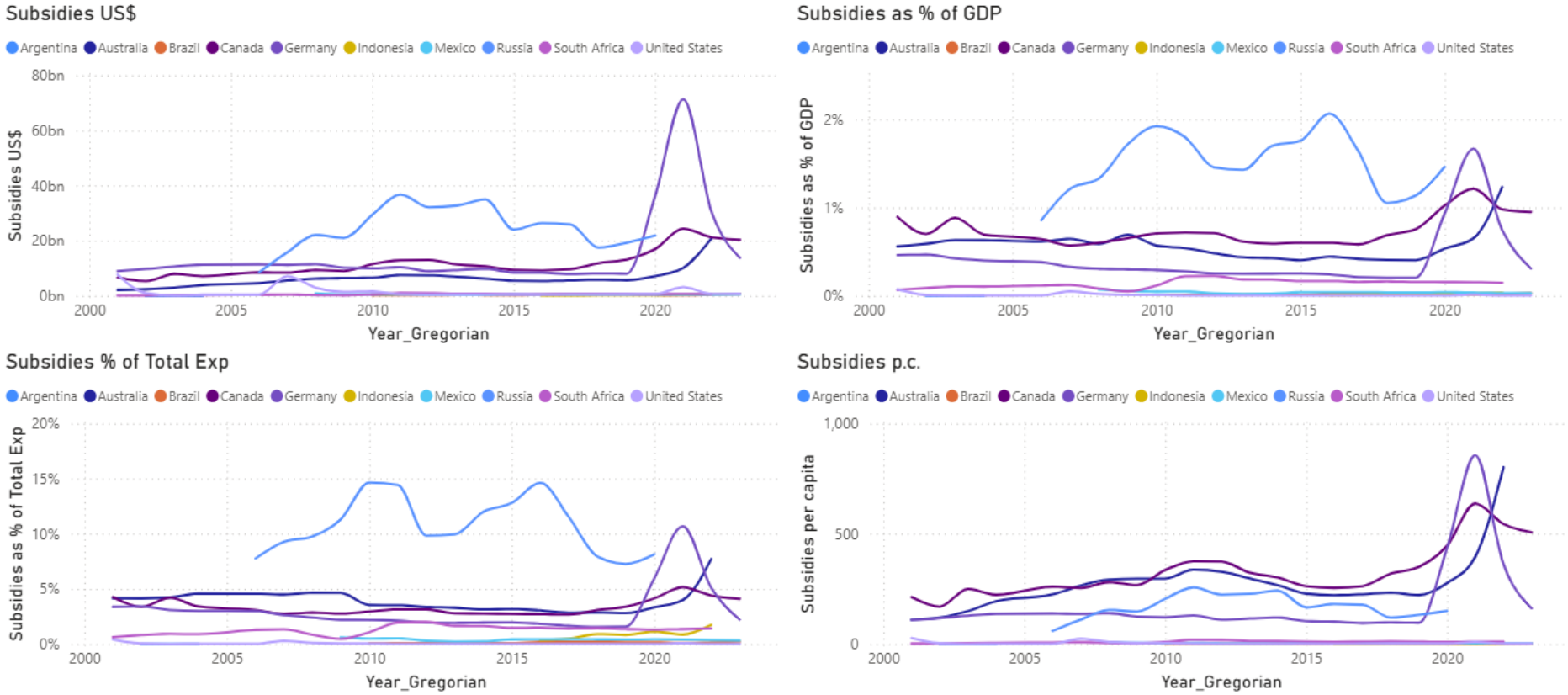


Figure 139. US State Government Key Inputs: Subsidies for Companies: G20+5



Interest Payments

Figure 140. US GG Key Inputs: Interest Payments

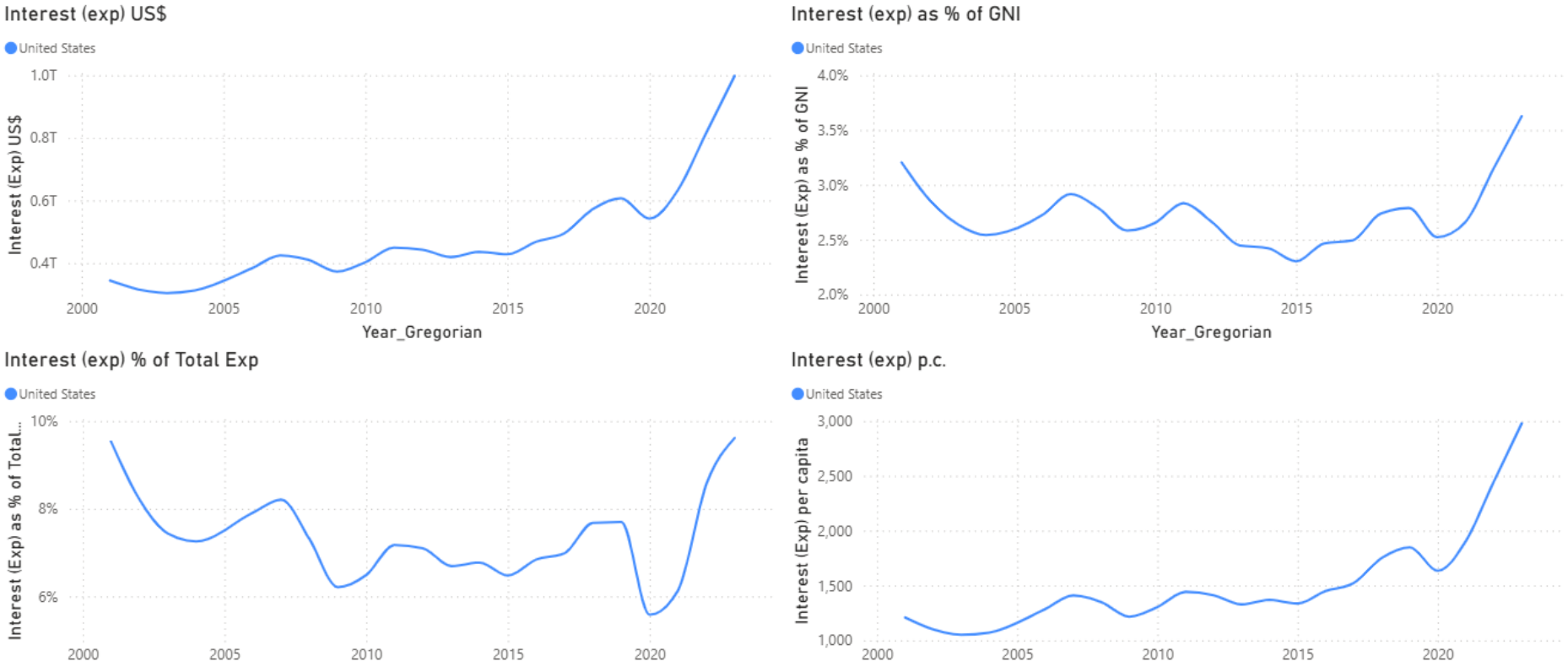


Figure 141. US State Government Key Inputs: Interest Payments

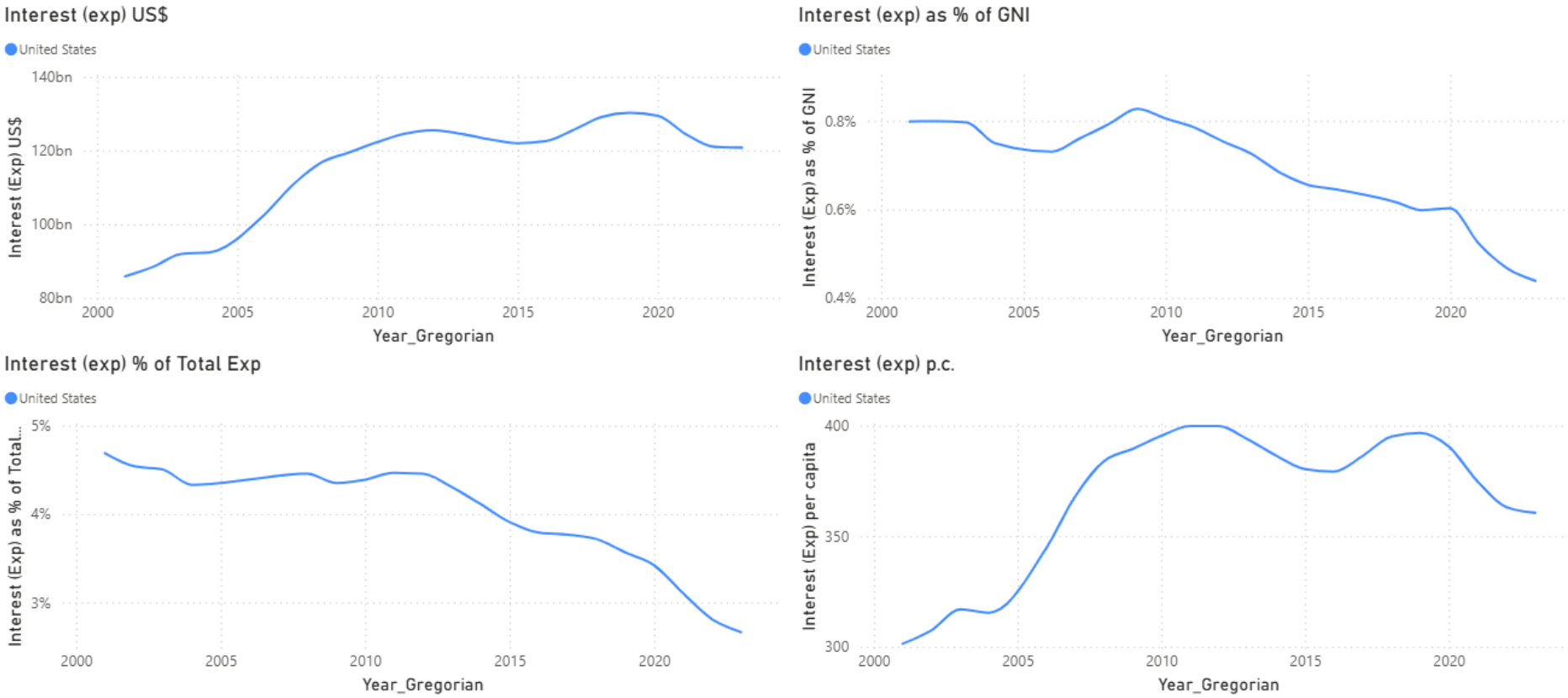


Figure 142. US State Government Key Inputs: Interest Payments: G20+5

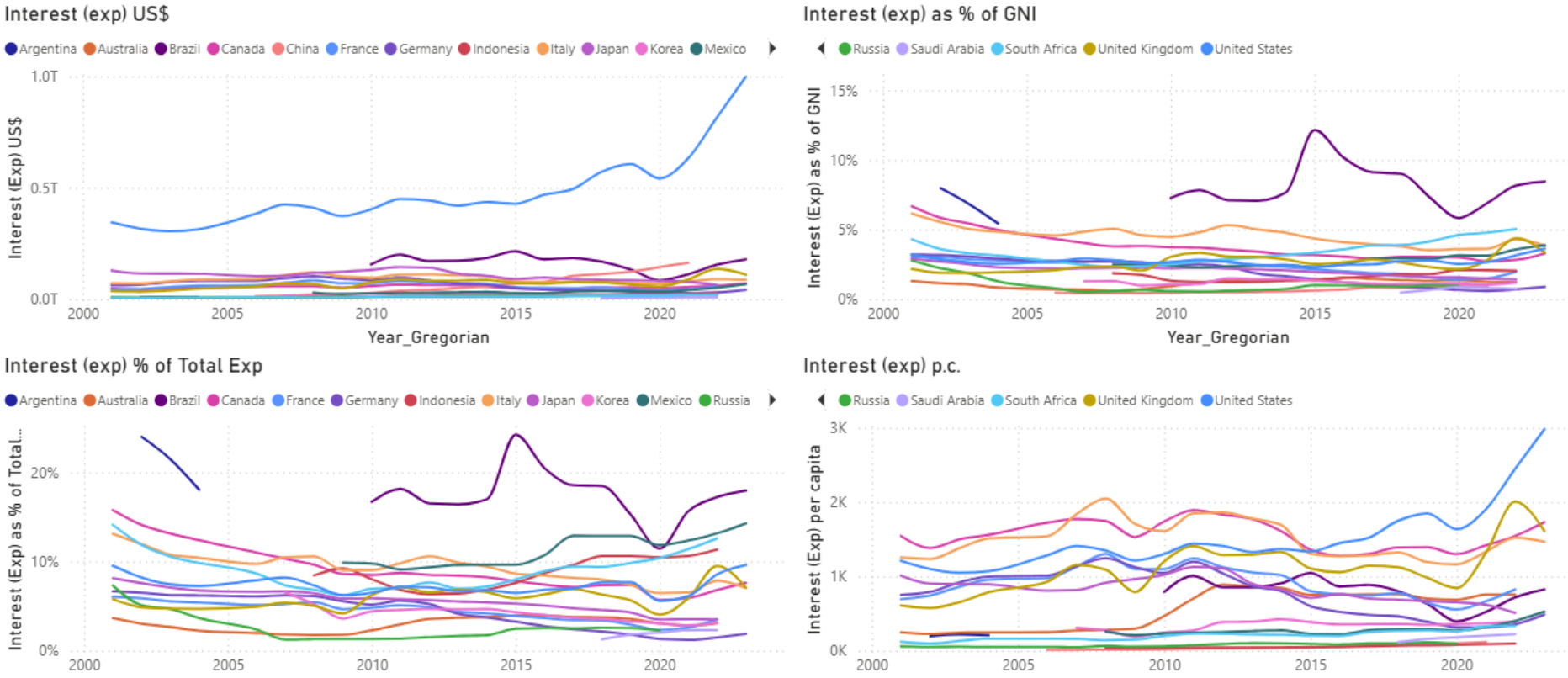
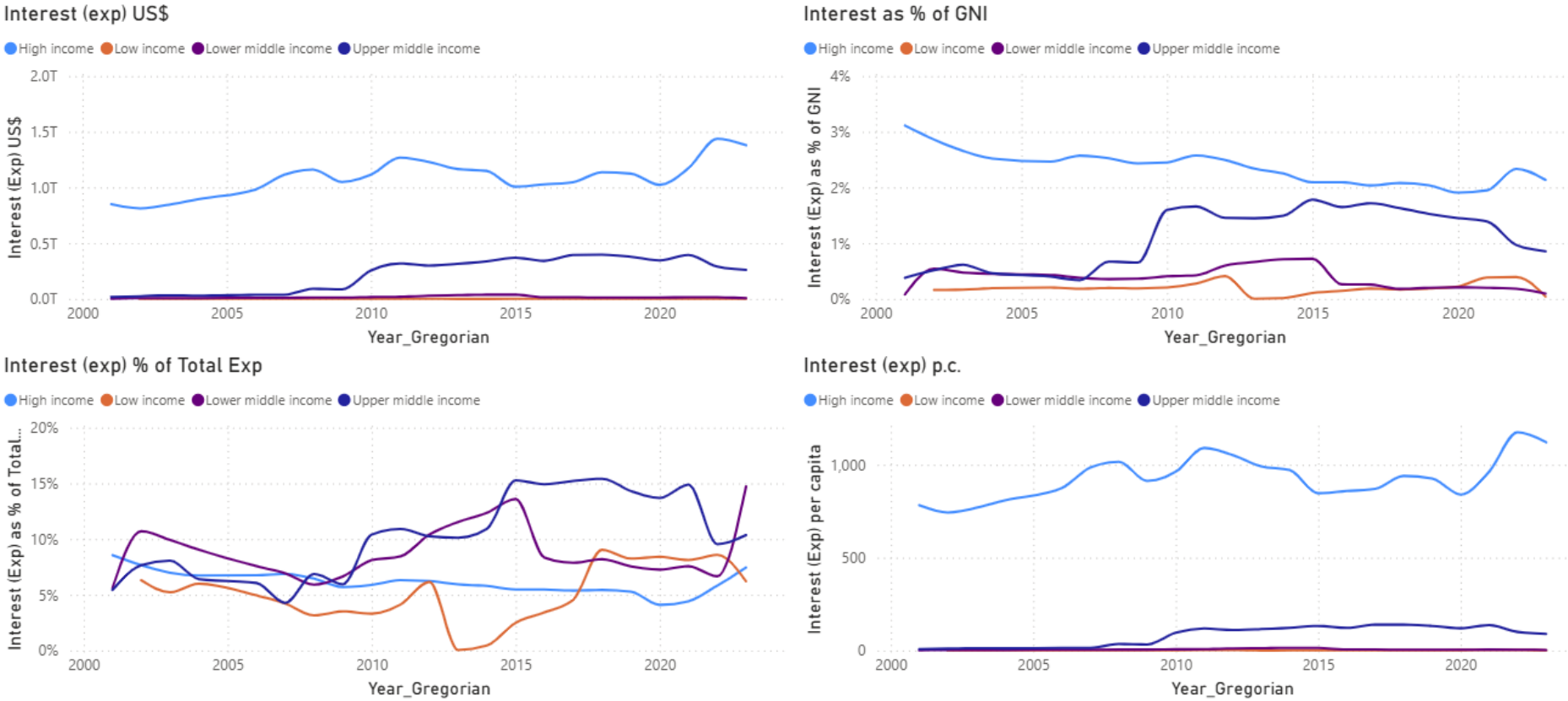


Figure 143. US State Government Key Inputs: Interest Payments: Country Income Groups



Acquisition of Non-Financial Assets

Figure 144. US GG Key Inputs: Acquisition of Non-Financial

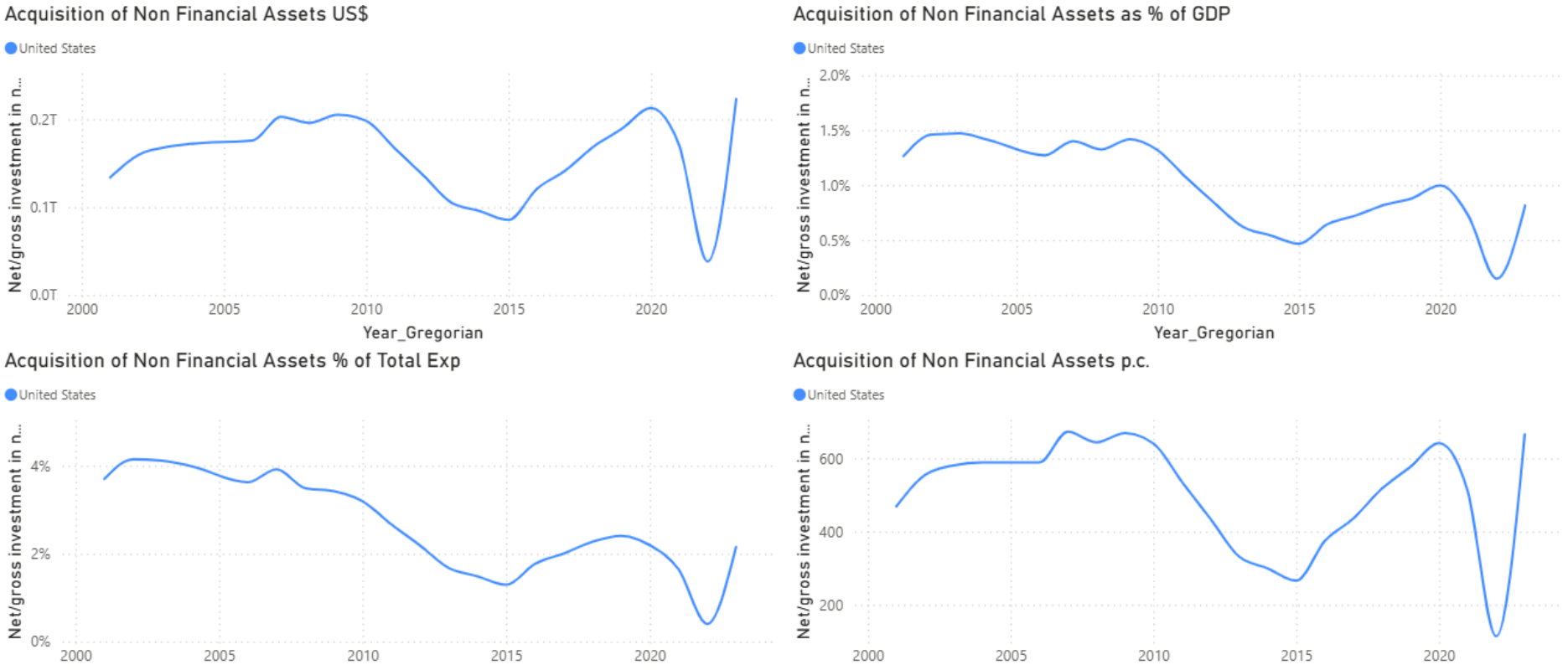


Figure 145. US State Government Key Inputs: Acquisition of Non-Financial

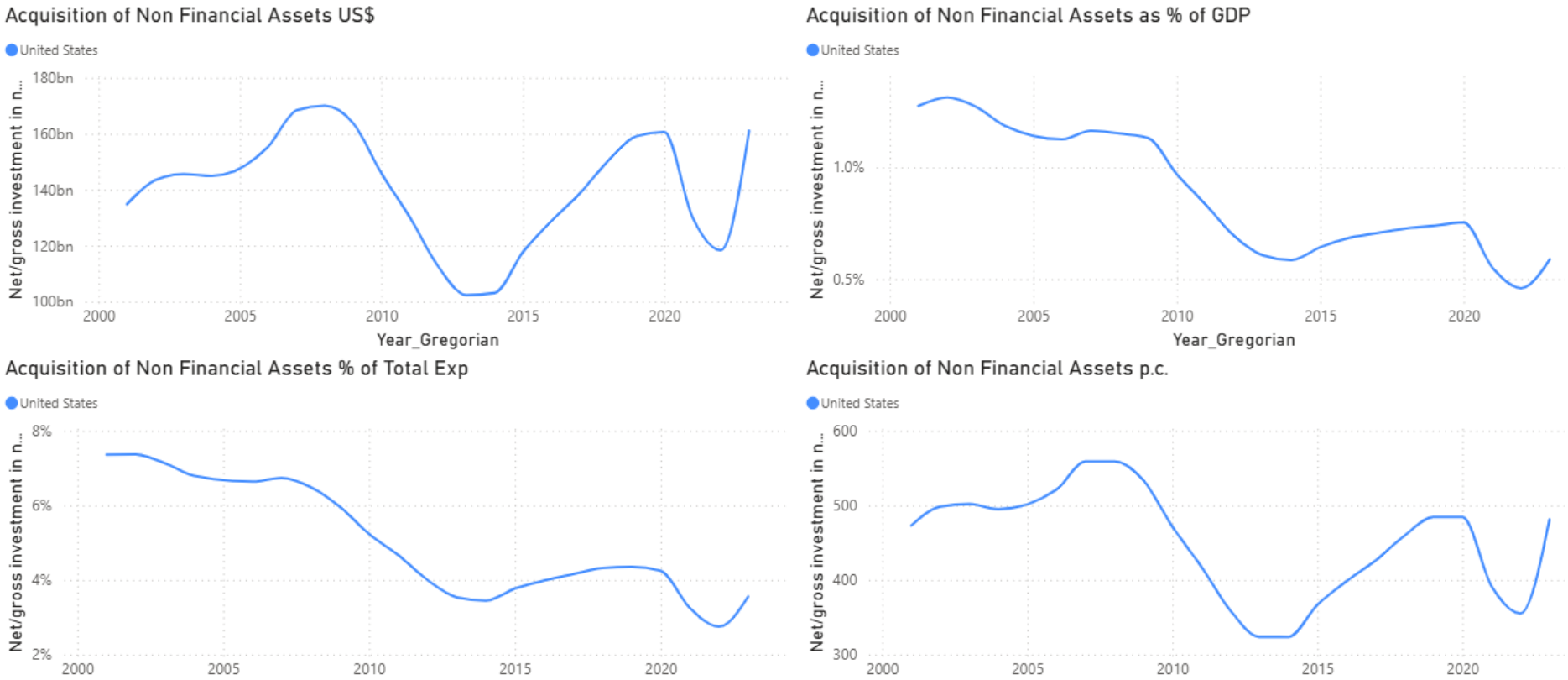
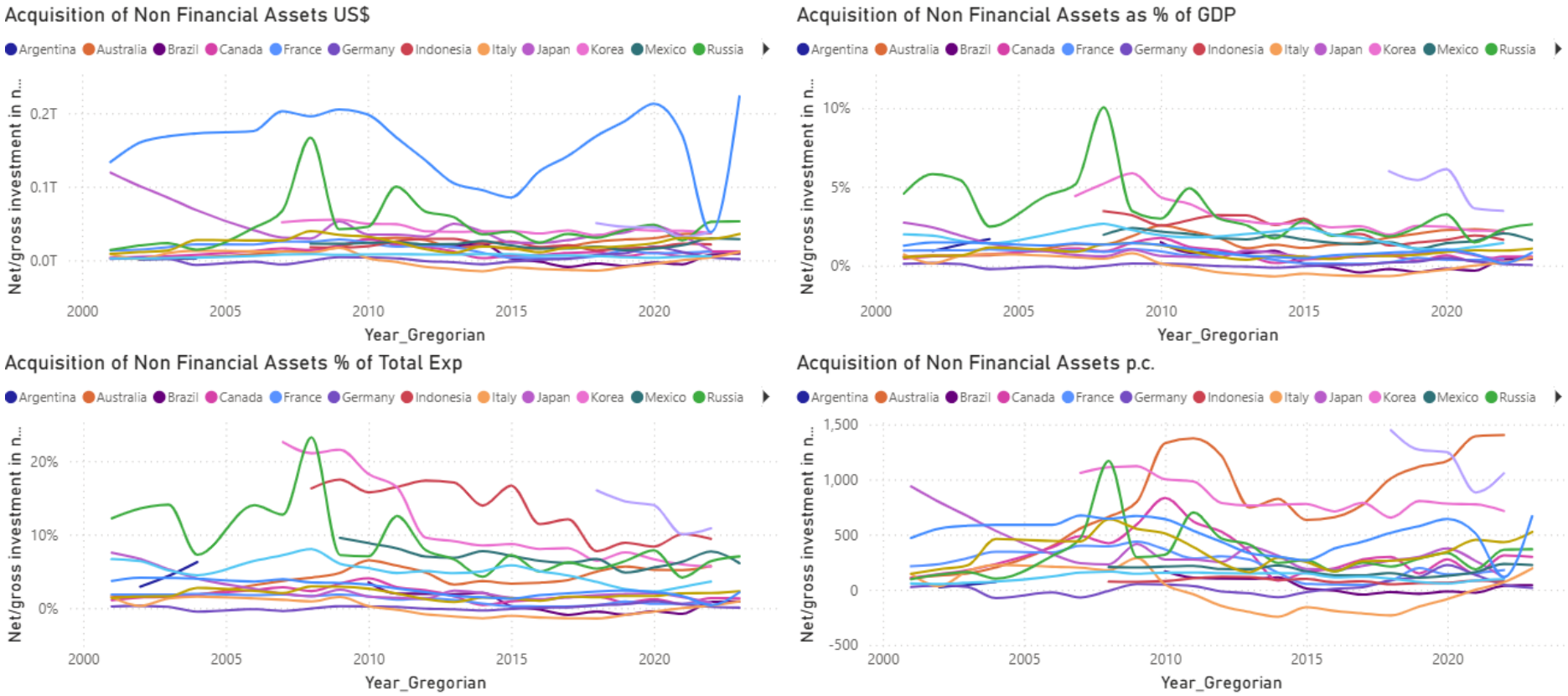


Figure 146. GG Key Inputs: Acquisition of Non-Financial: G20+5



Net Lending/Borrowing (NLB)

Figure 147. US GG Key Inputs: Net Lending/Borrowing(NLB)

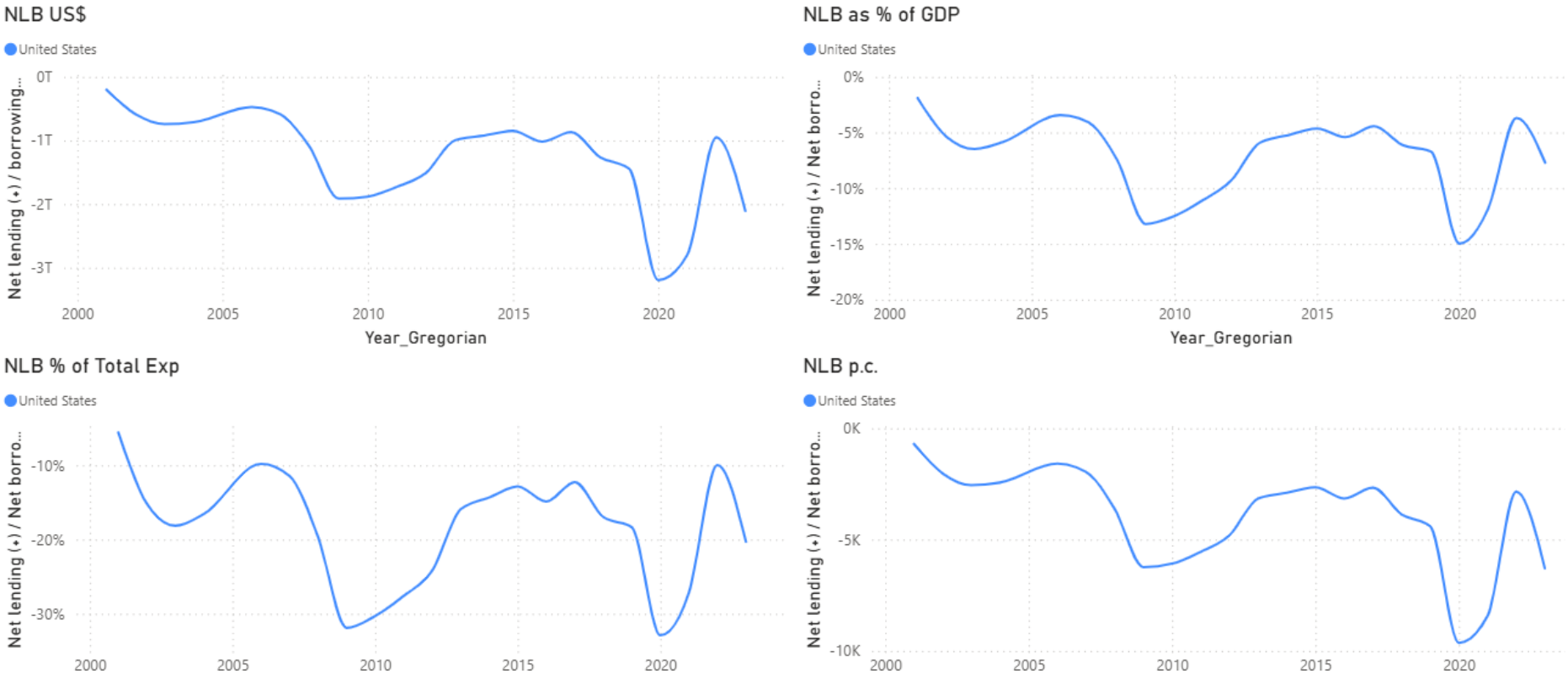


Figure 148. US State Government Key Inputs: Net Lending/Borrowing(NLB)

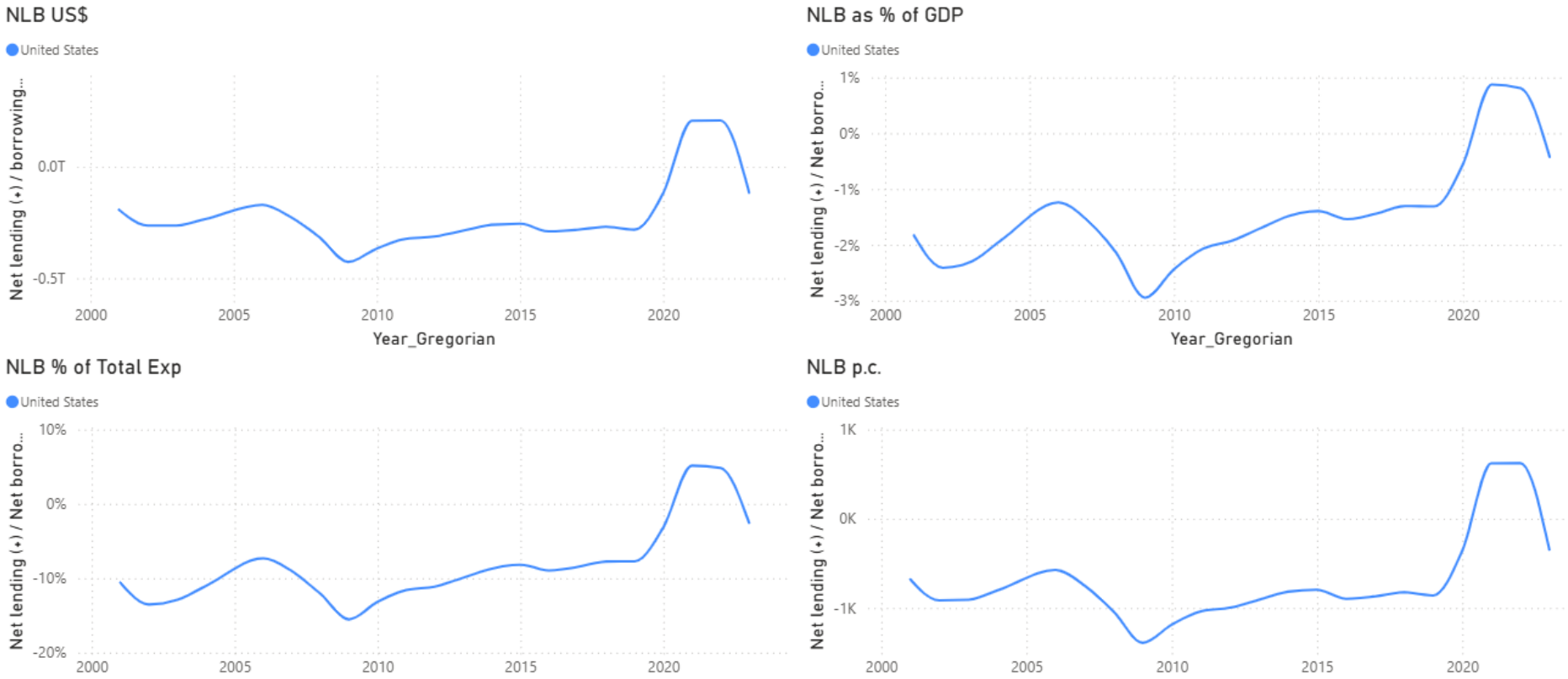


Figure 149. US GG Key Inputs: Net Lending/Borrowing(NLB): G20+5

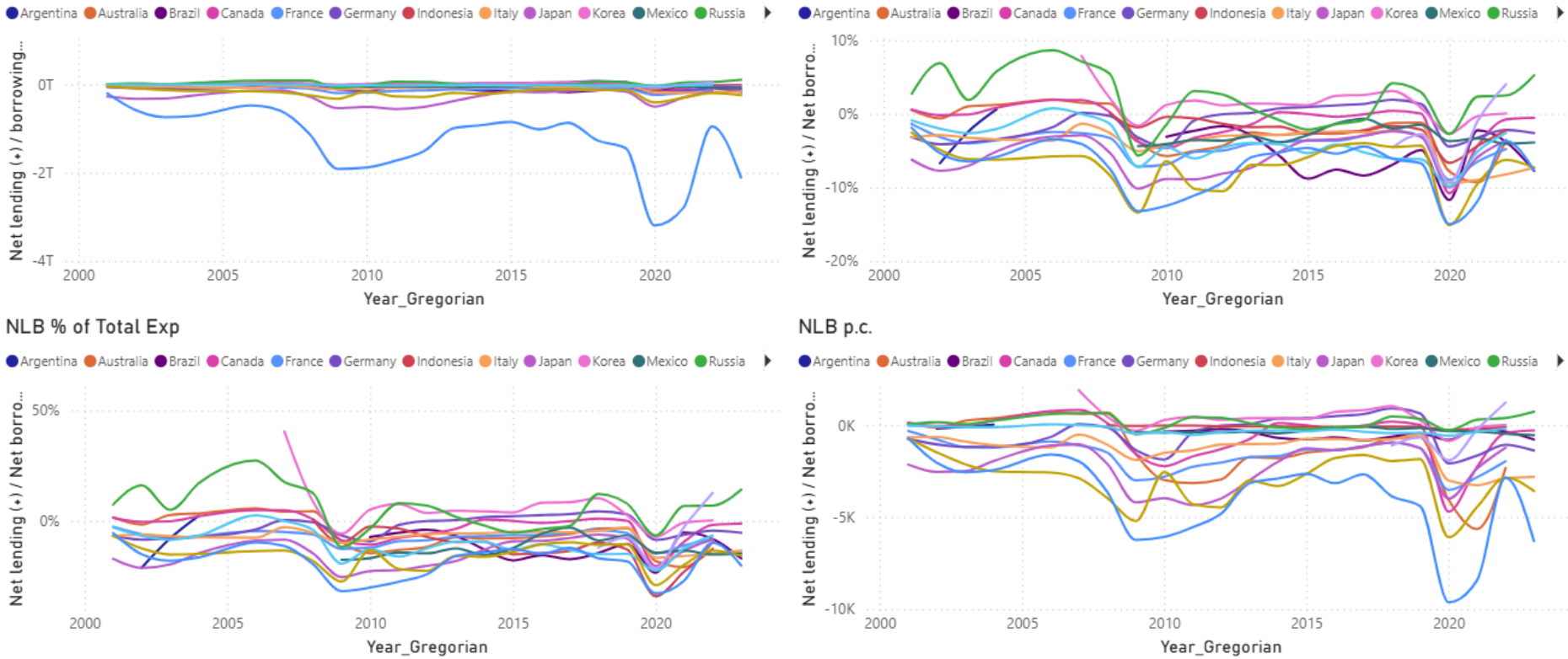


Figure 150. NLB Trends: Democrat V's Republican Presidencies

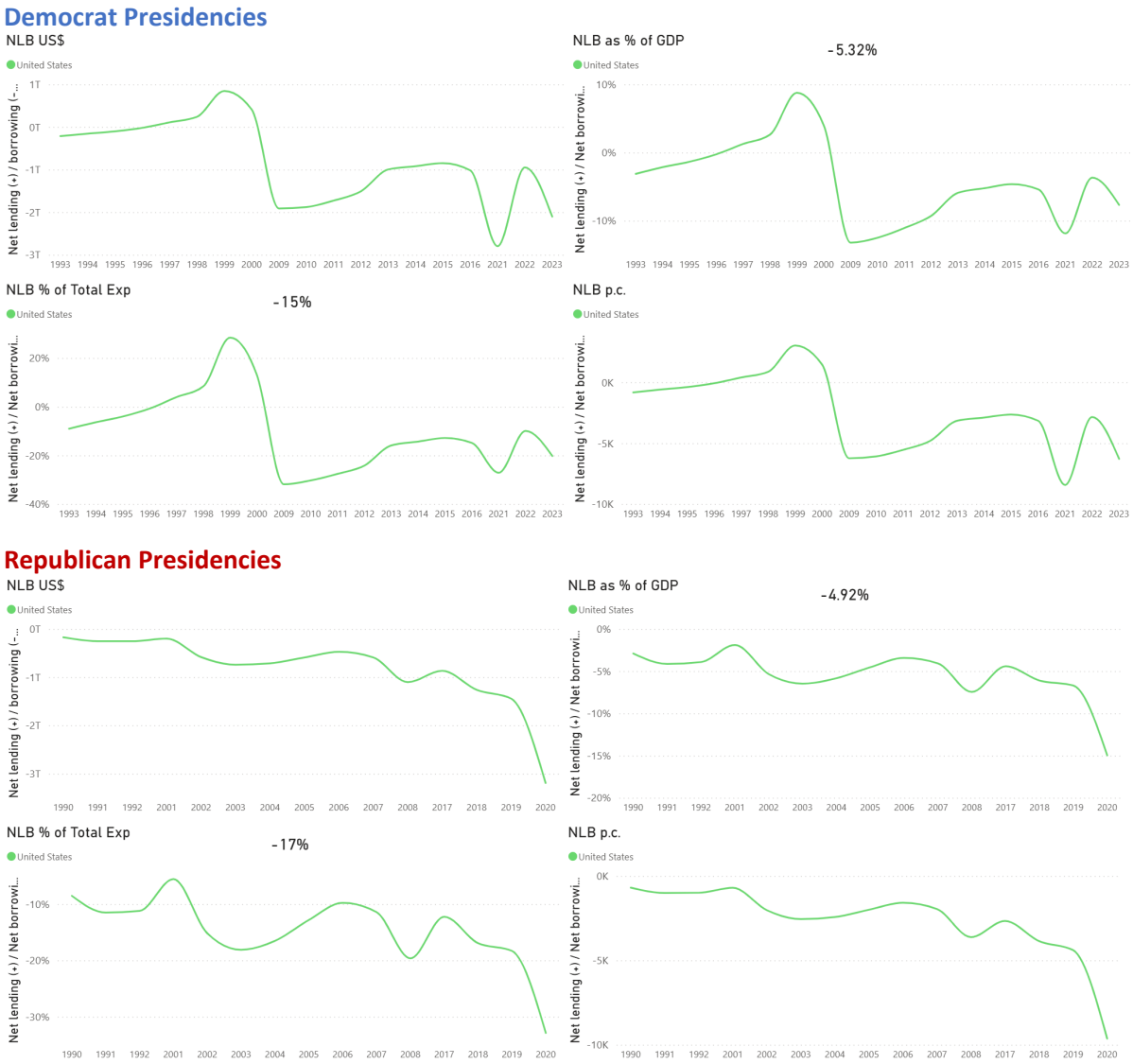


Figure 151. US GG Key Inputs: Net Lending/Borrowing (NLB) Coherence

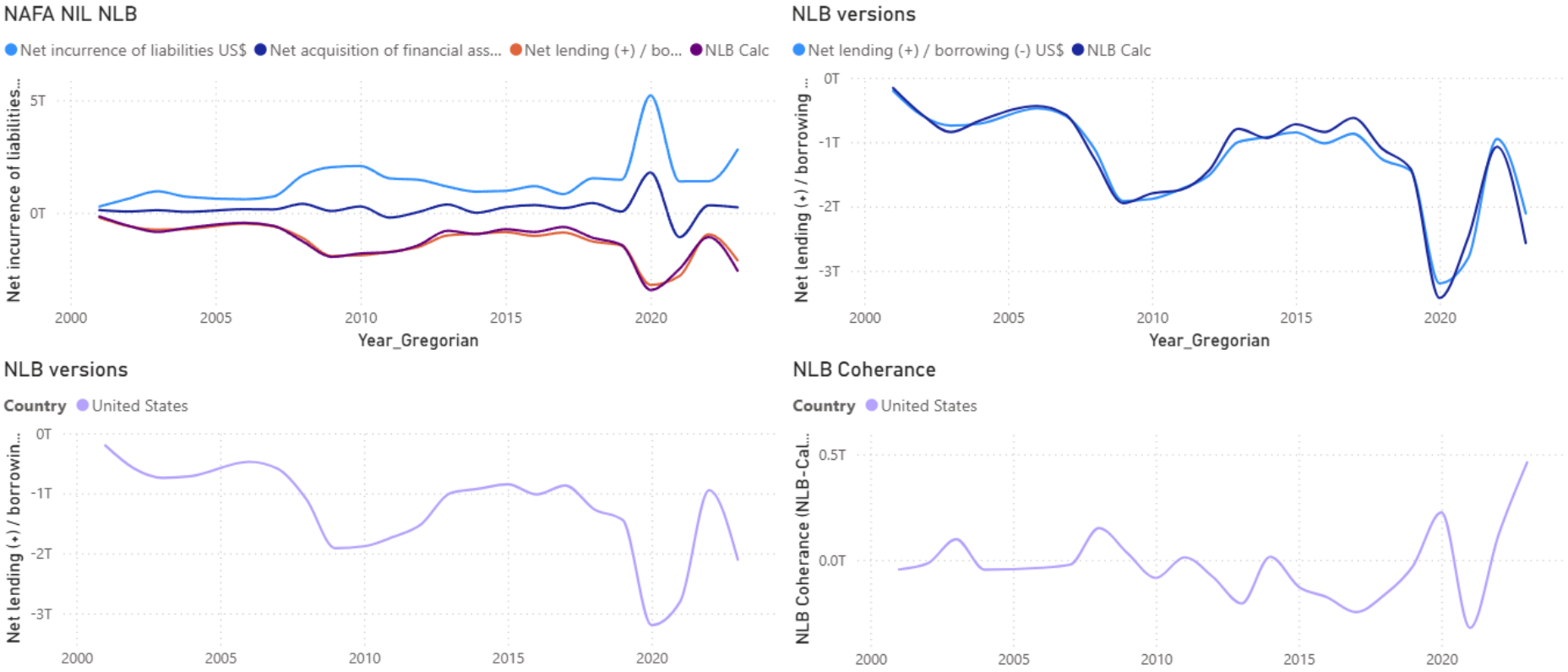


Figure 152. US GG Key Inputs: Net Acquisition of Financial Assets: G20+5

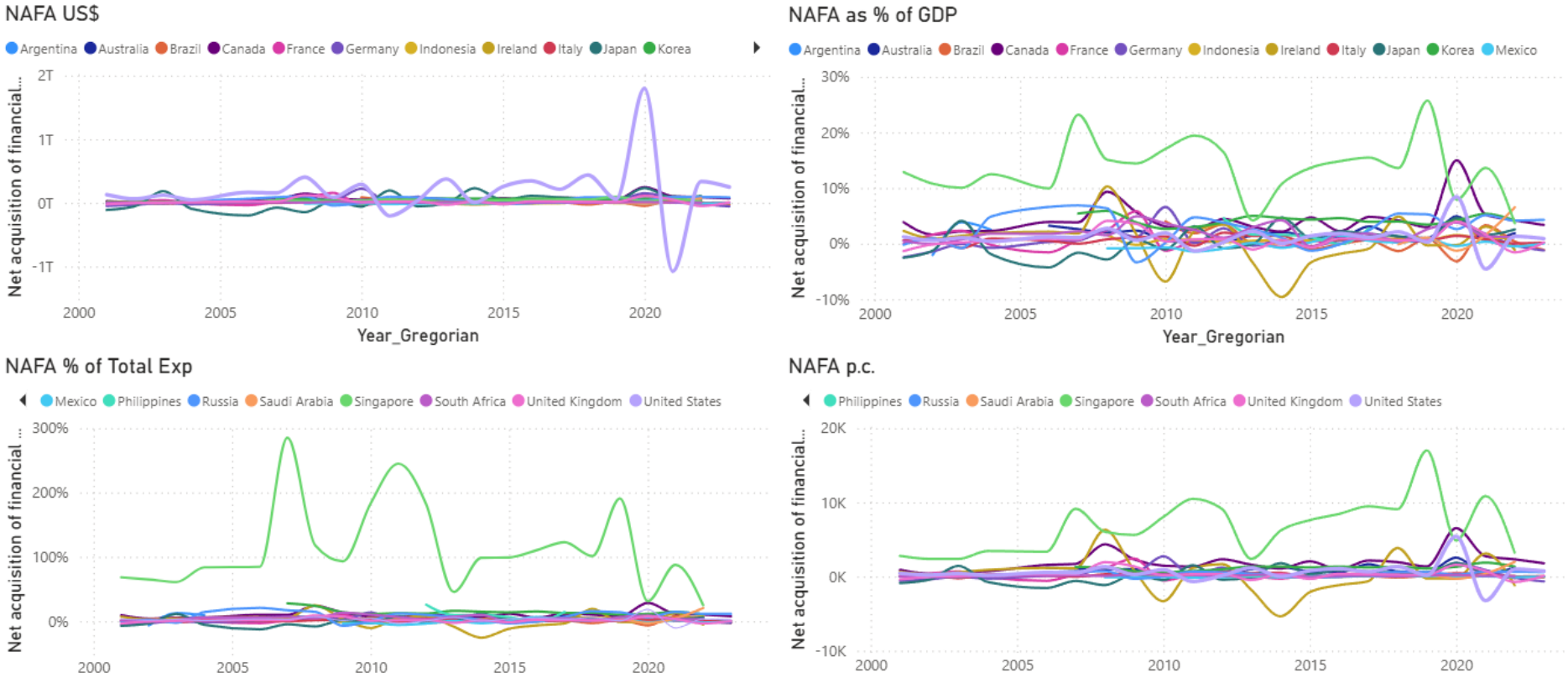
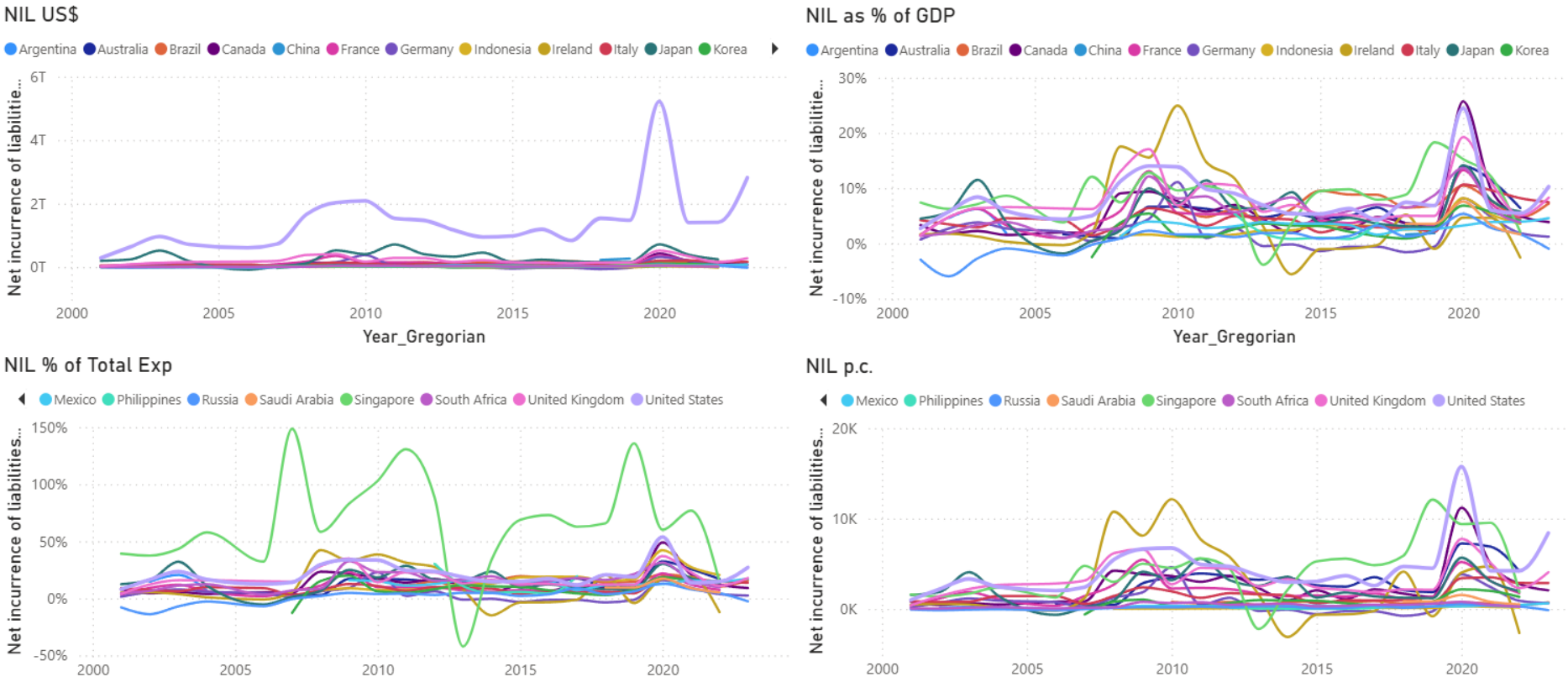


Figure 153. US GG Key Inputs: Net Incurrence of Liabilities: G20+5



Gross Saving/Borrowing (for Current Spending)

Figure 154. US GG Key Inputs: Gross Saving/Borrowing (for current spending)

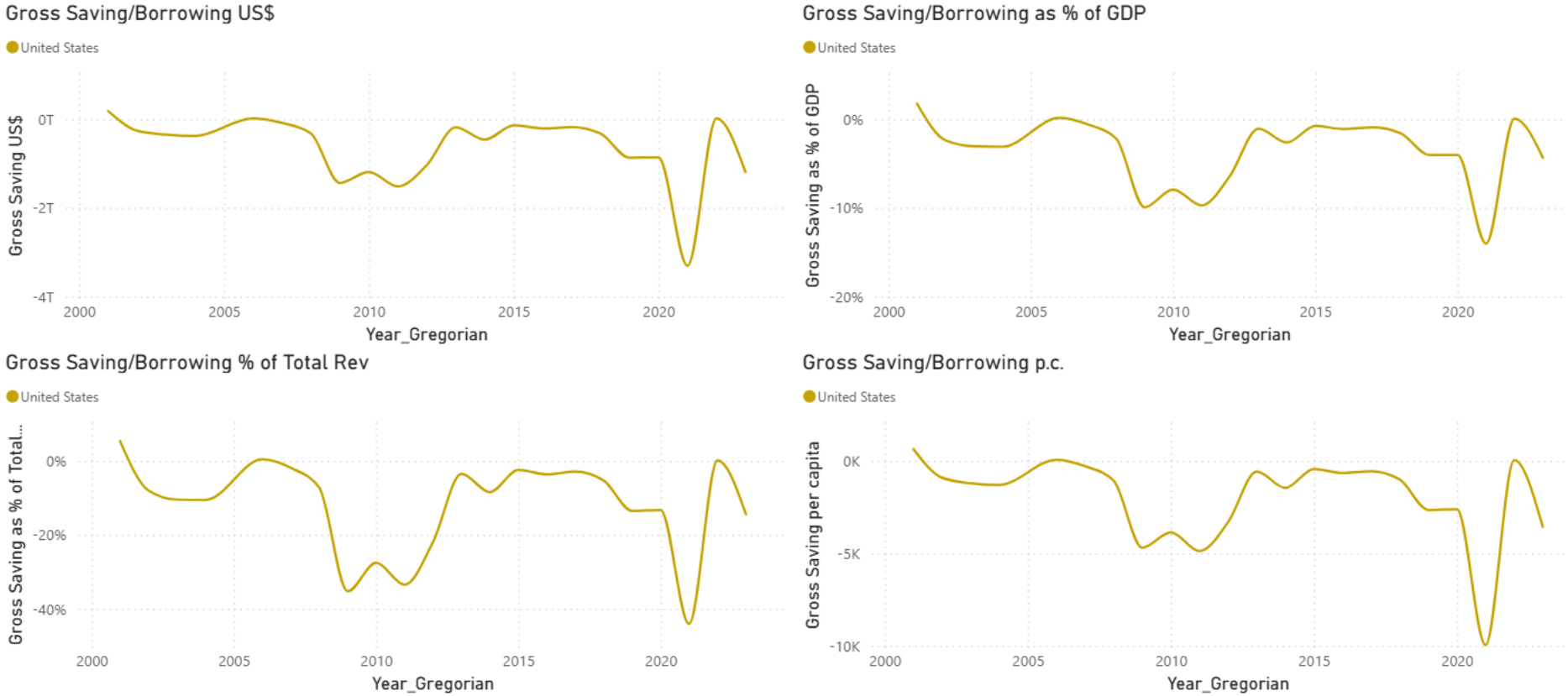


Figure 155. US State Government Key Inputs: Gross Saving/Borrowing (for current spending)

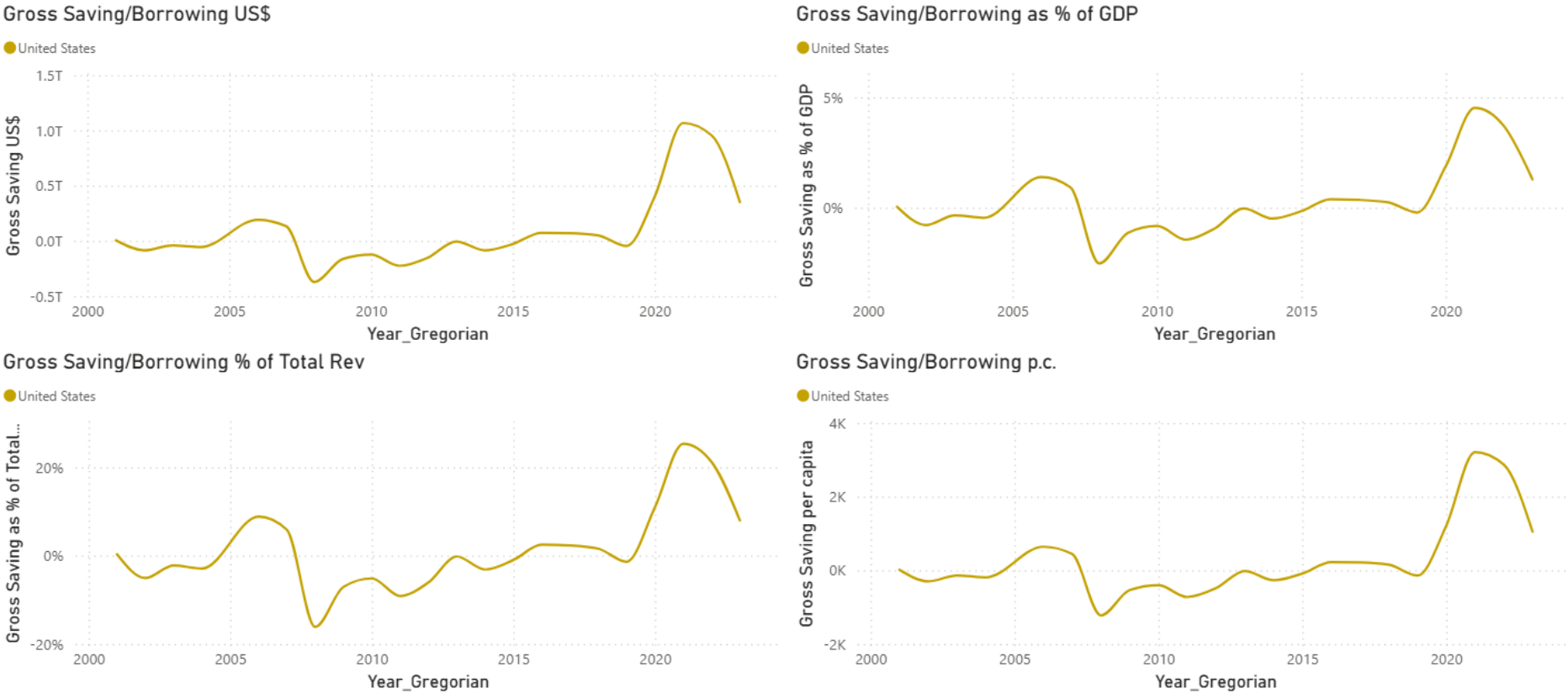


Figure 156. US GG Key Inputs: Gross Saving/Borrowing (for current spending): G20+5

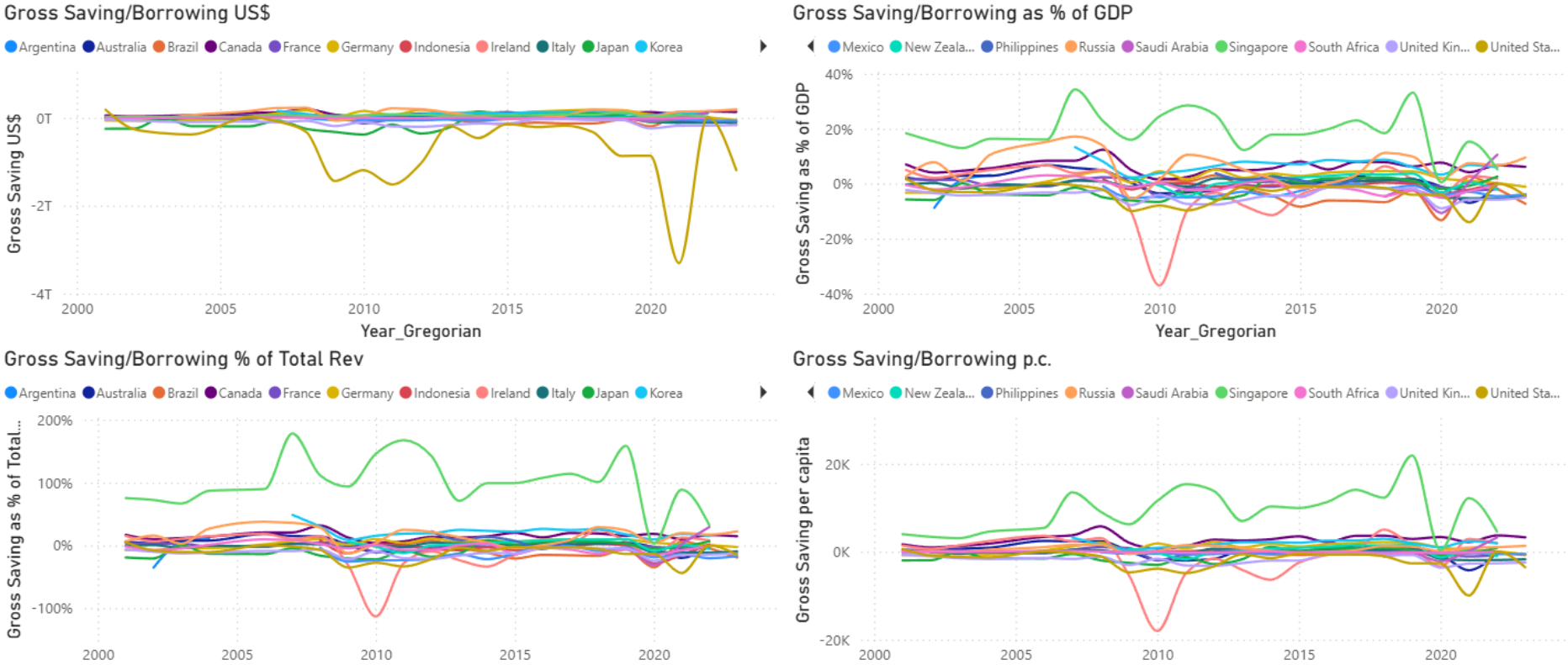


Figure 157. US GG Key Inputs: Gross Saving/Borrowing (for current spending): G20+5 (Shares 2001-23)

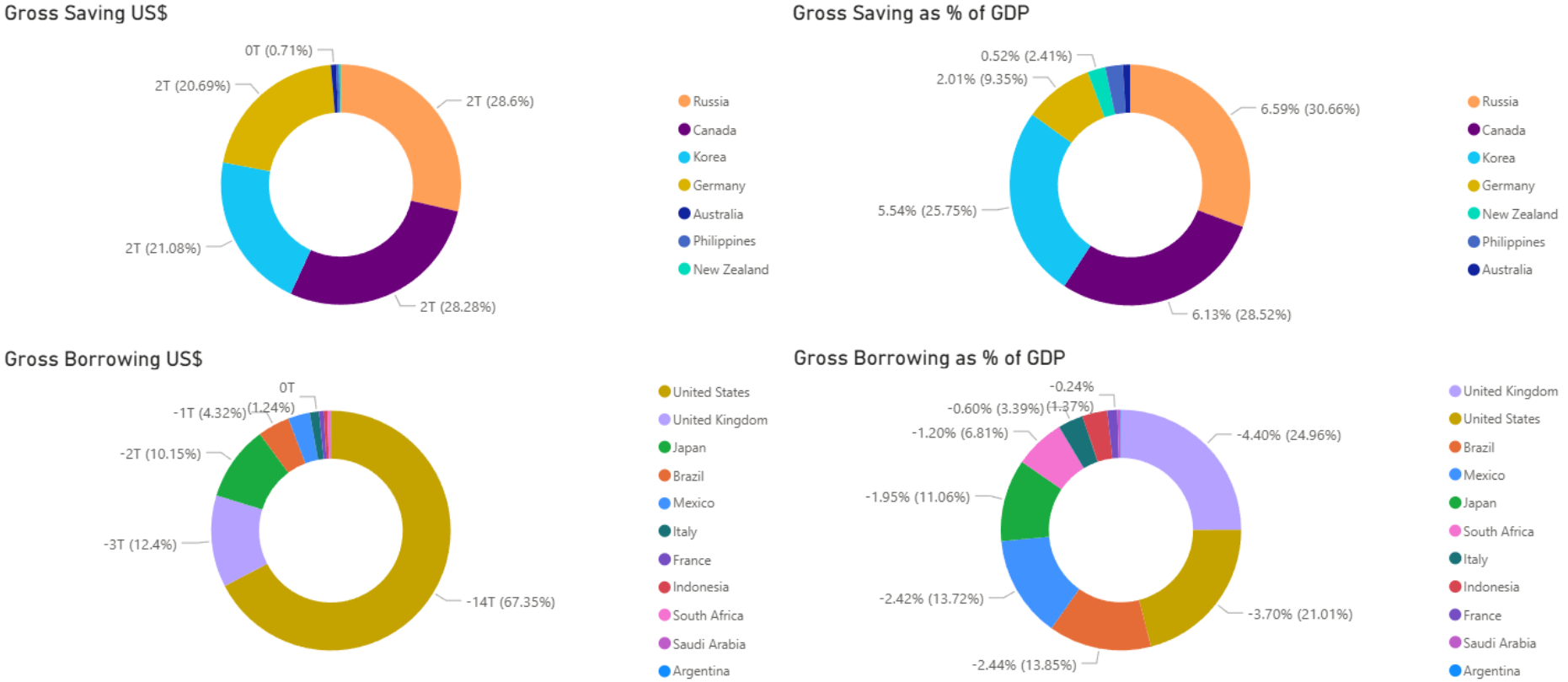


Figure 158. US GG Key Inputs: Gross Saving/Borrowing (for current spending): Income Groups

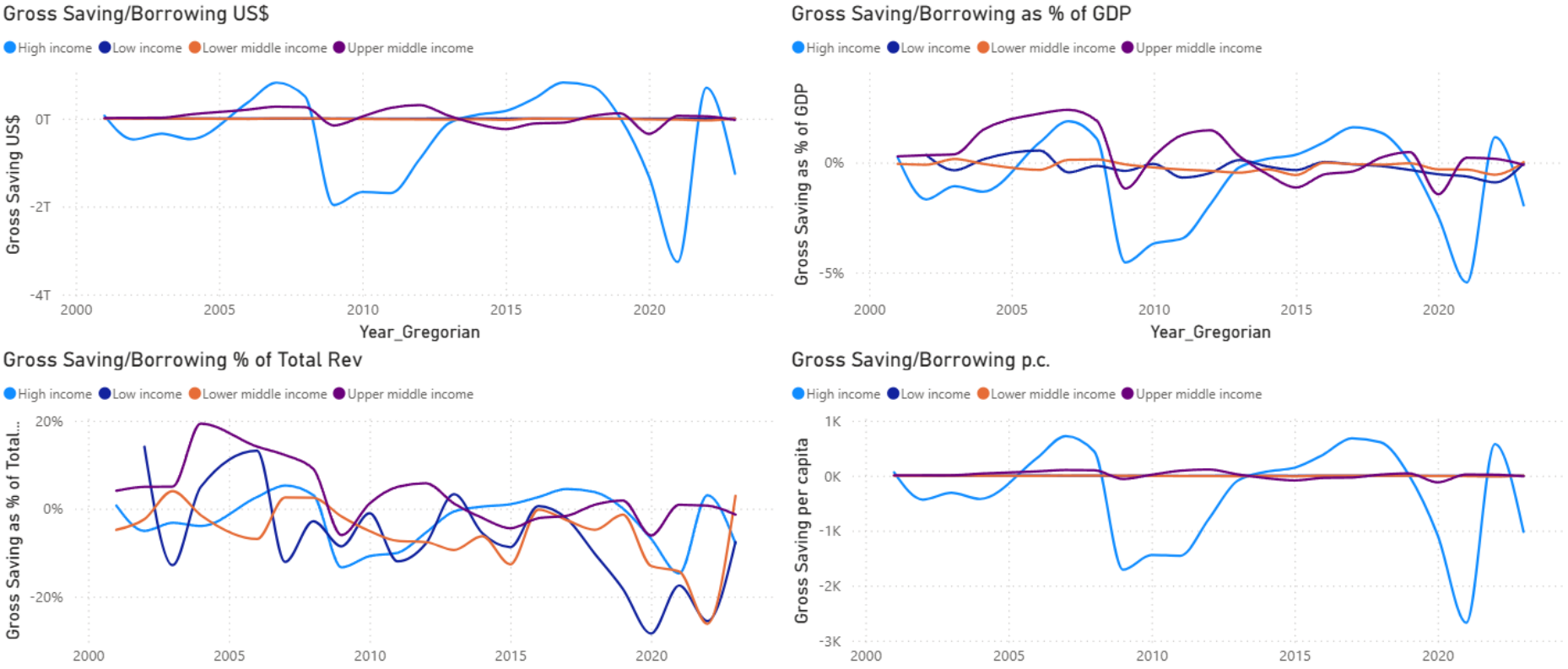


Figure 159. US GG Key Inputs: Gross Saving/Borrowing (for current spending): Regions

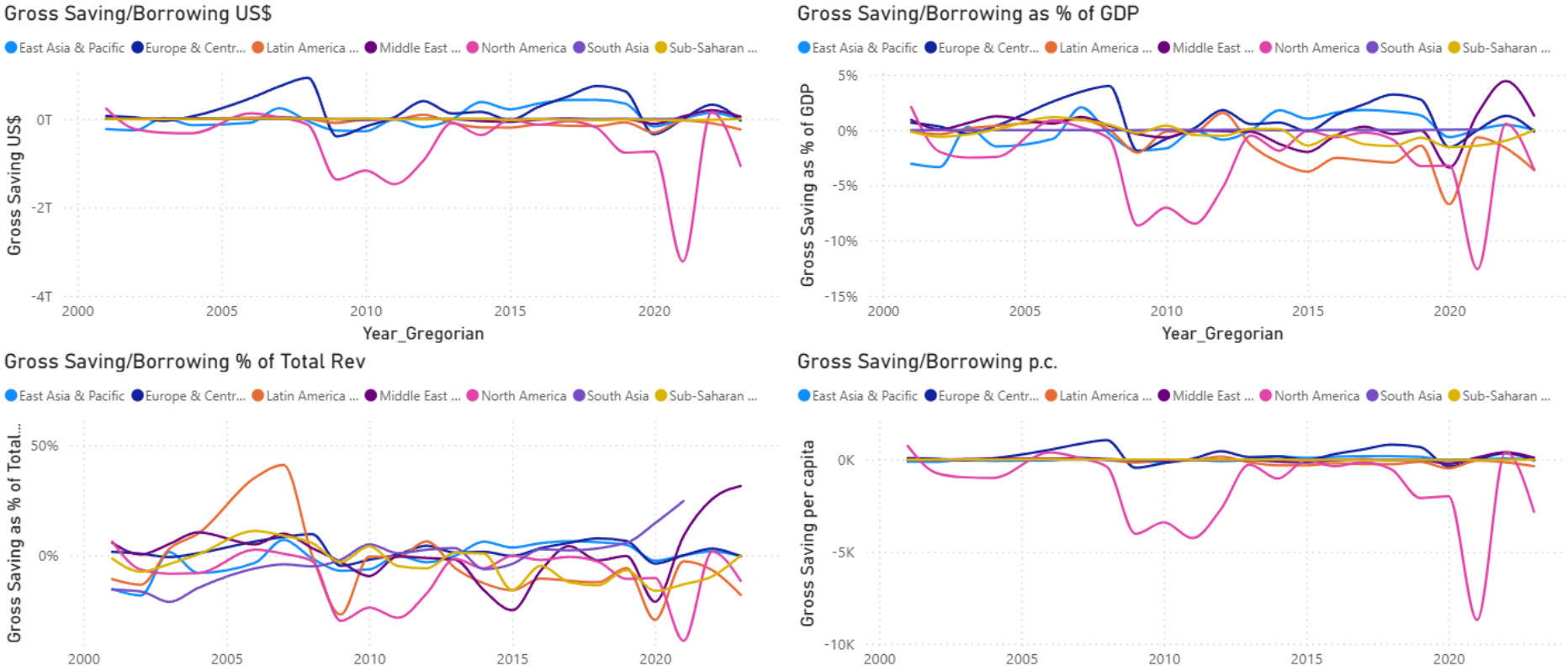


Figure 160. US GG Key Inputs: Gross Saving/Borrowing (for current spending): Resource Dependency

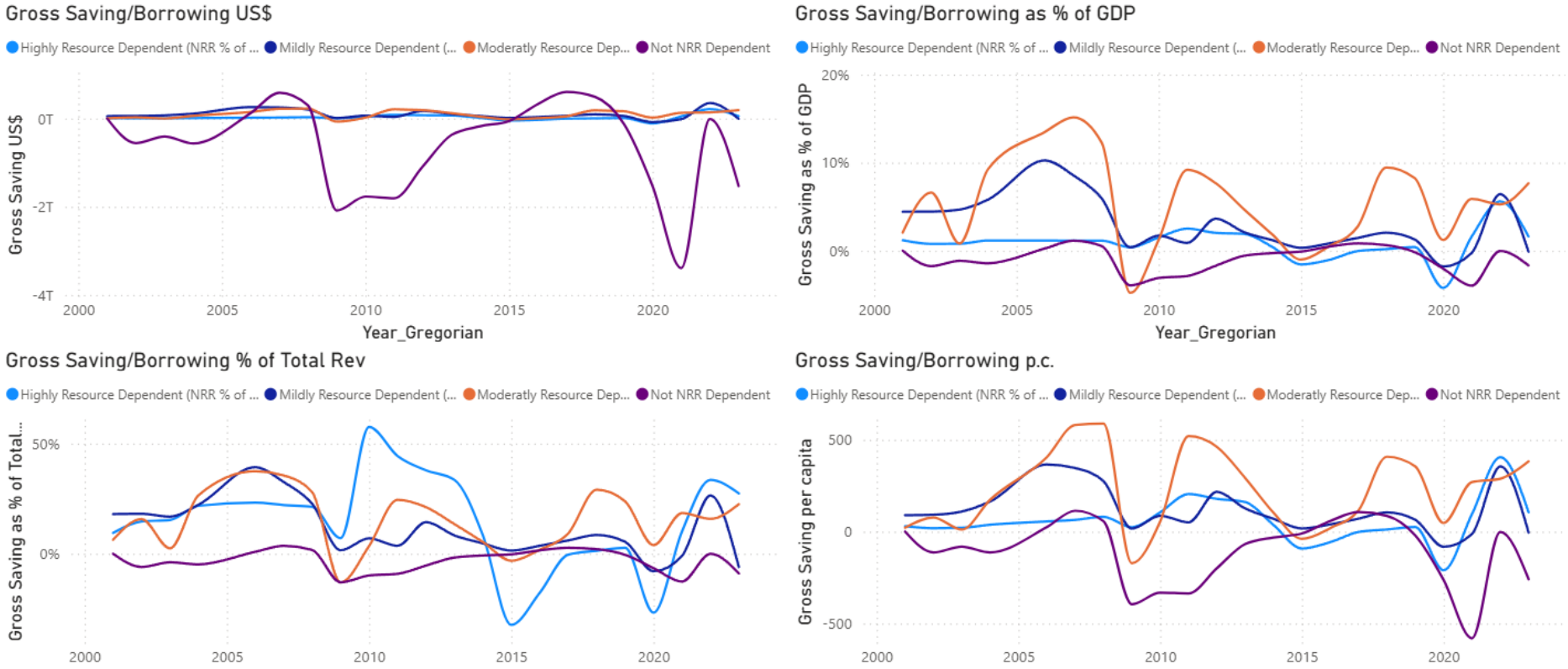


Figure 161. US GG Key Inputs: Gross Saving/Borrowing (for current spending): Religions

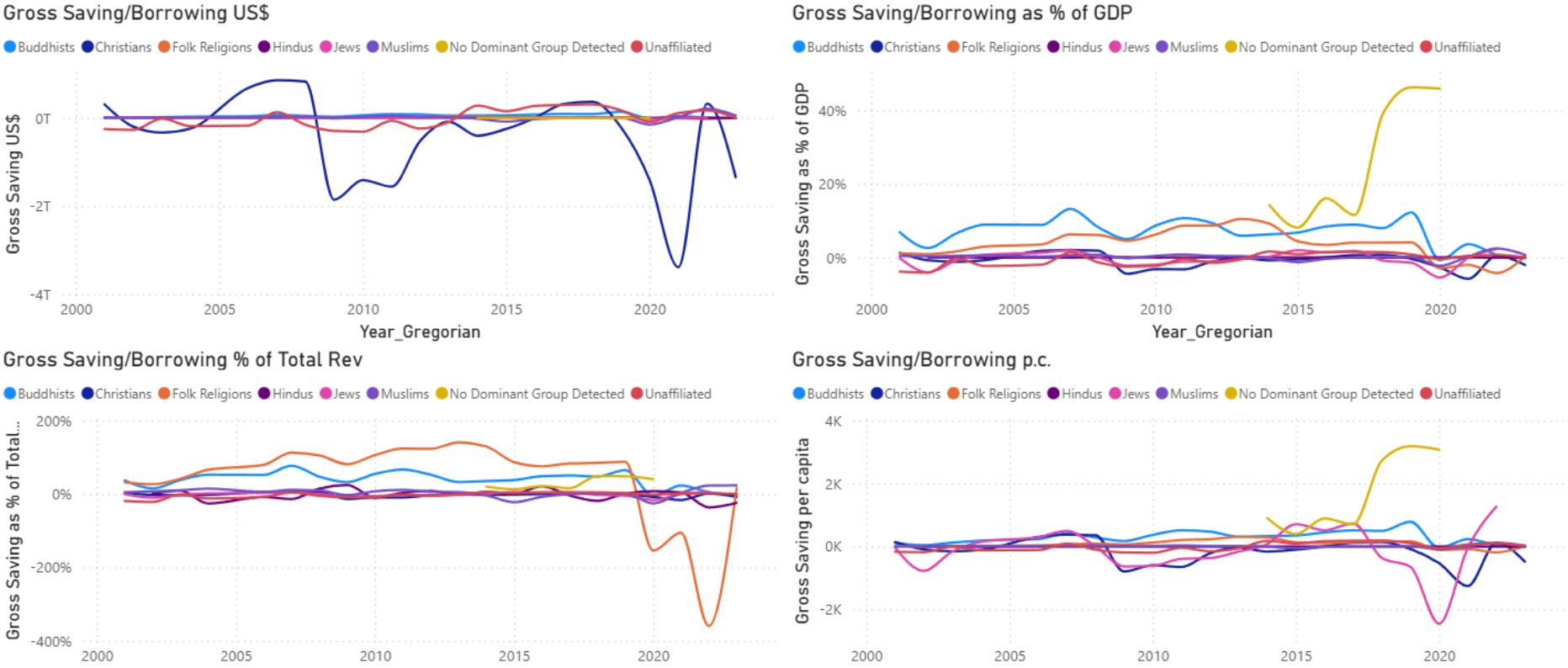
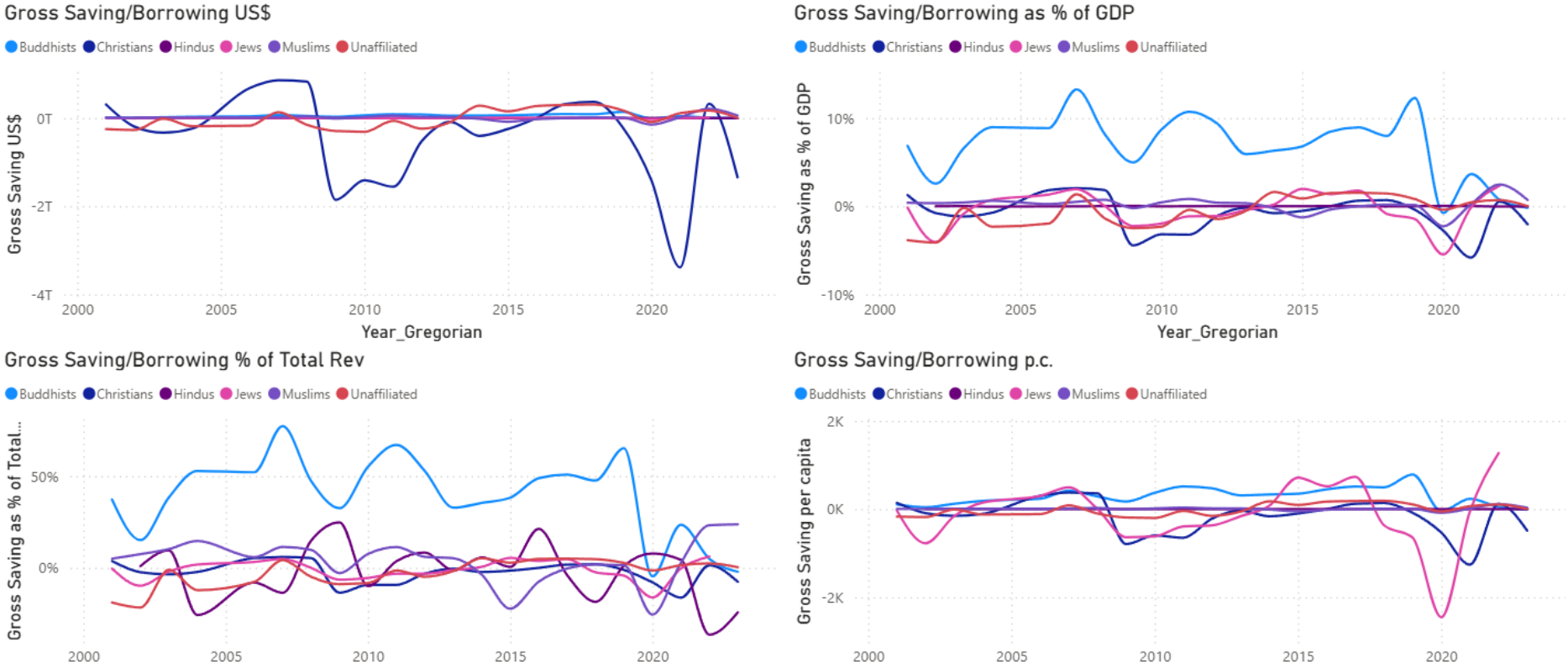


Figure 162. US GG Key Inputs: Gross Saving/Borrowing (for current spending): Religions (excl. Folk and No Dominant)



Fiscal Burden

Figure 163. US GG Key Inputs: Fiscal Burden

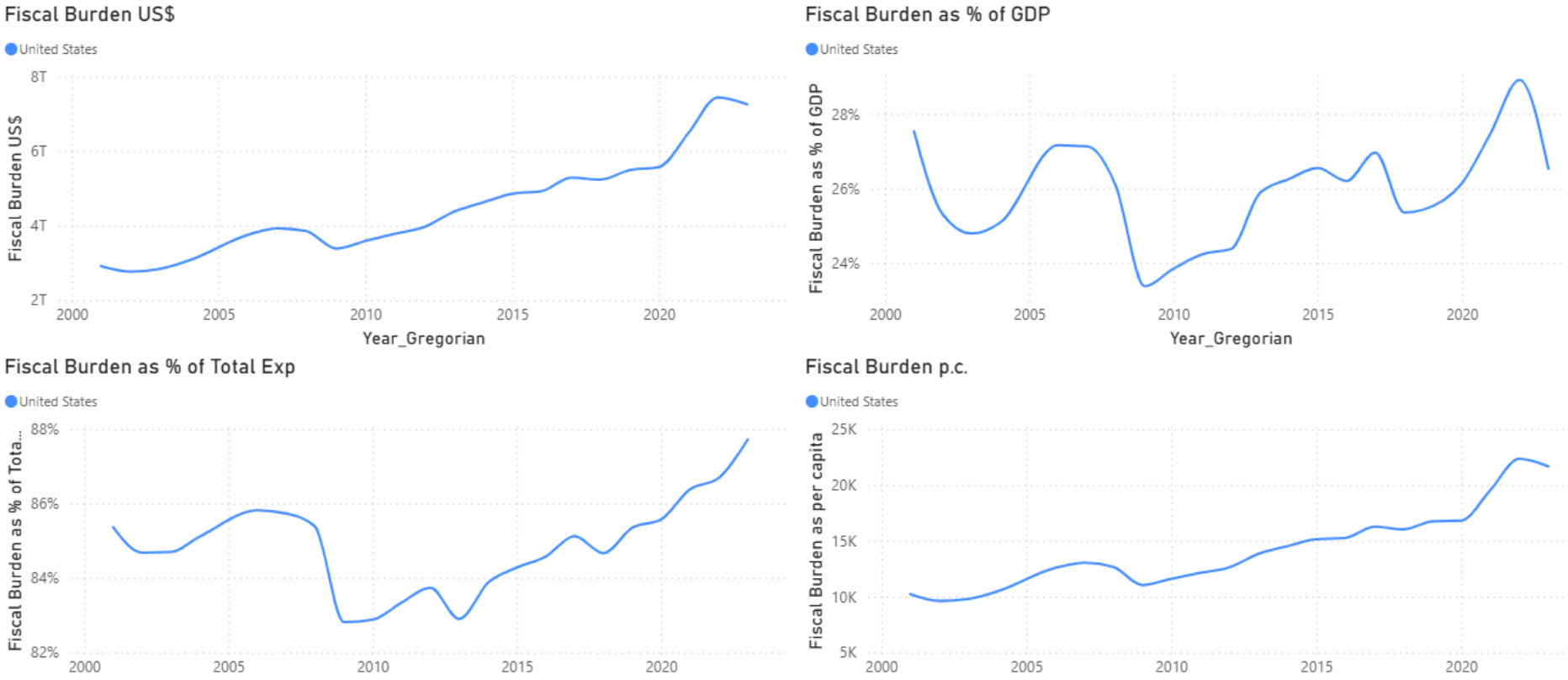
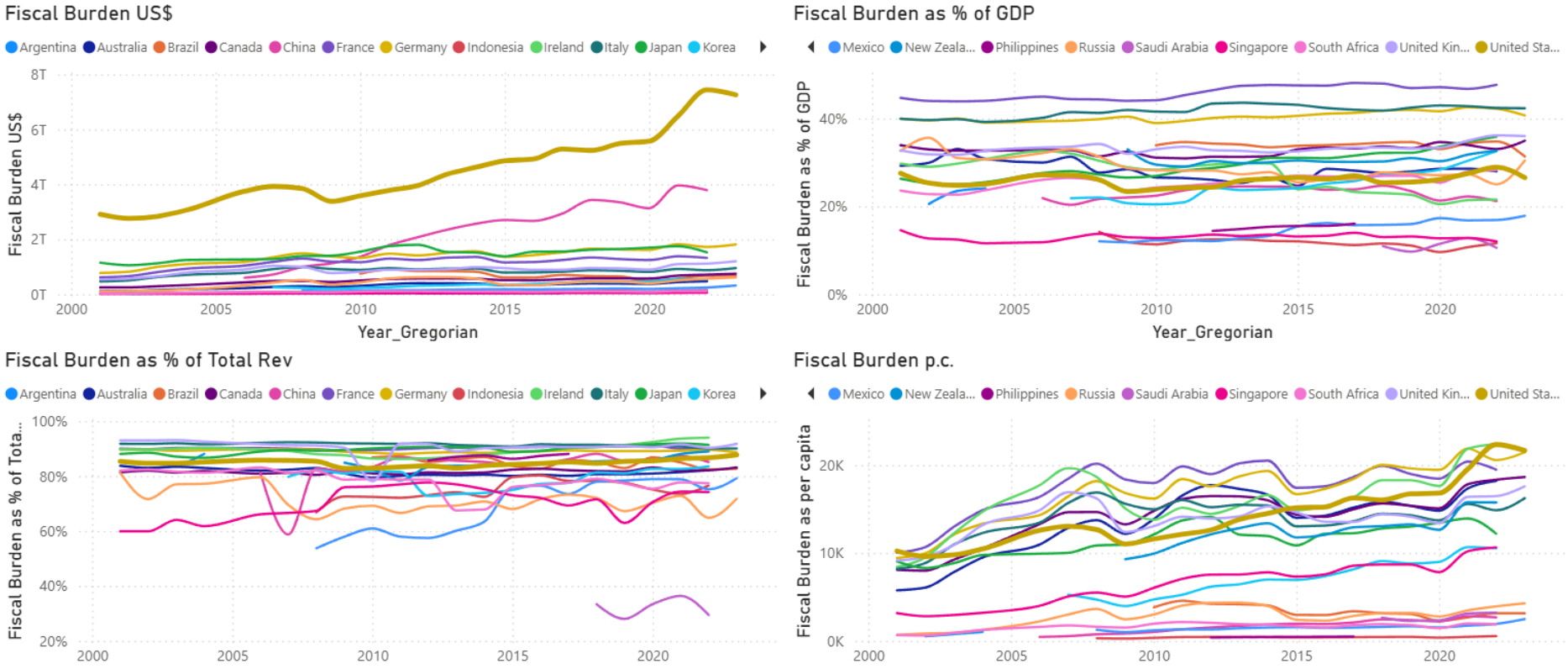
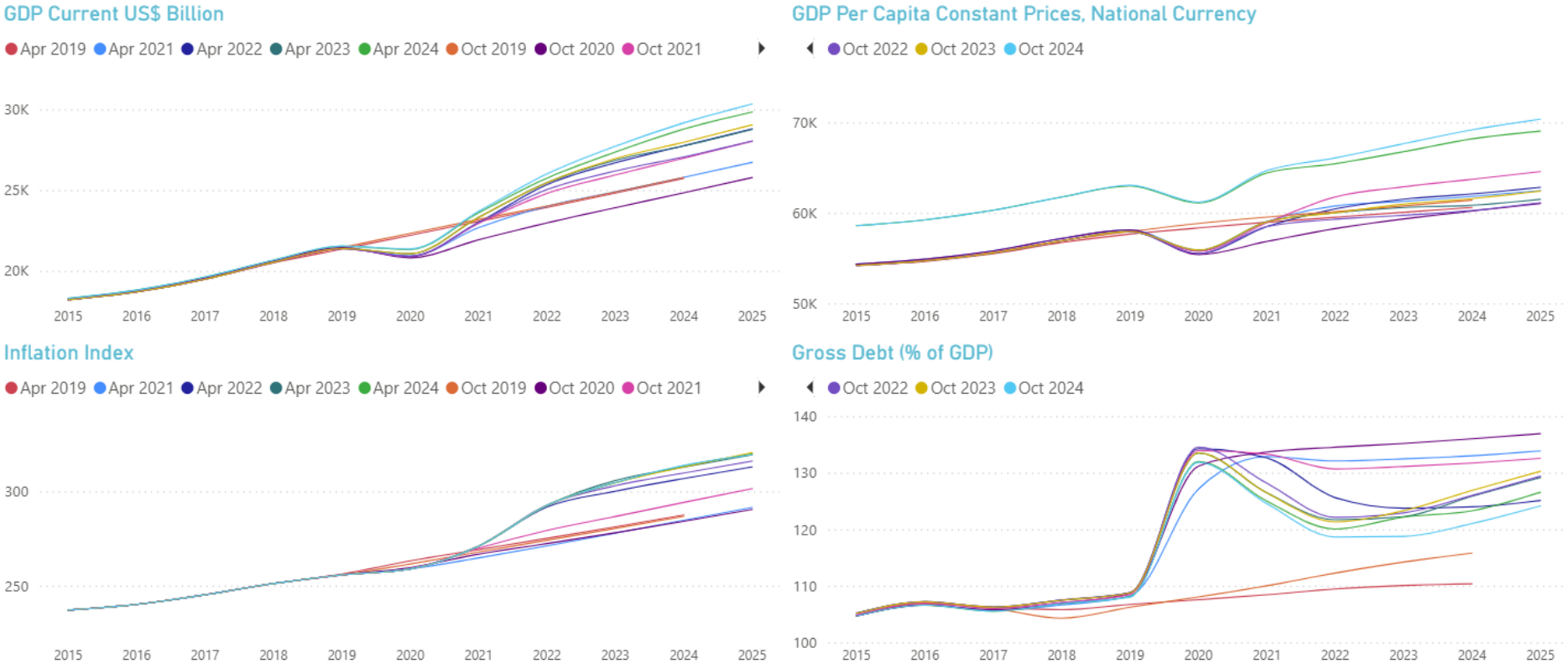


Figure 164. US GG Key Inputs: Fiscal Burden: G20+5

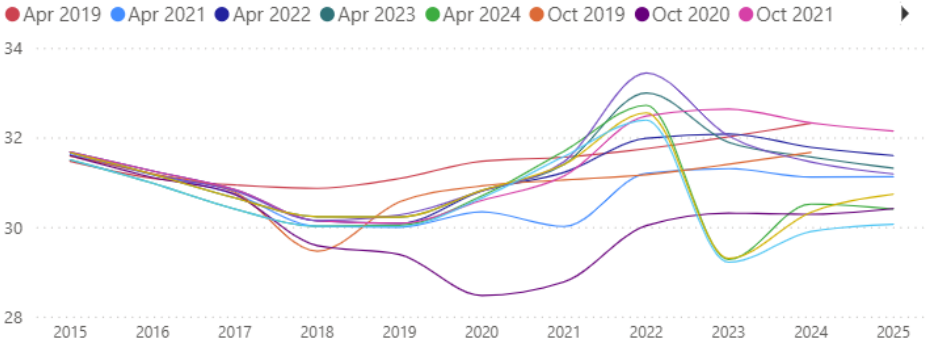


US Fiscal Forecast Volatility

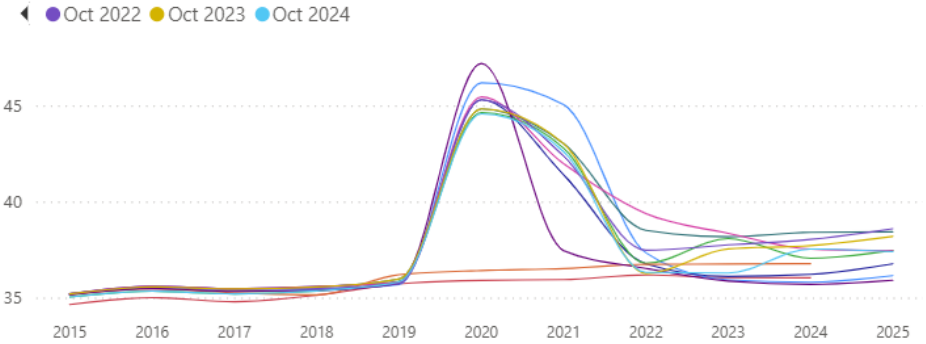
Figure 165. US Fiscal Forecasting Volatility (WEO)



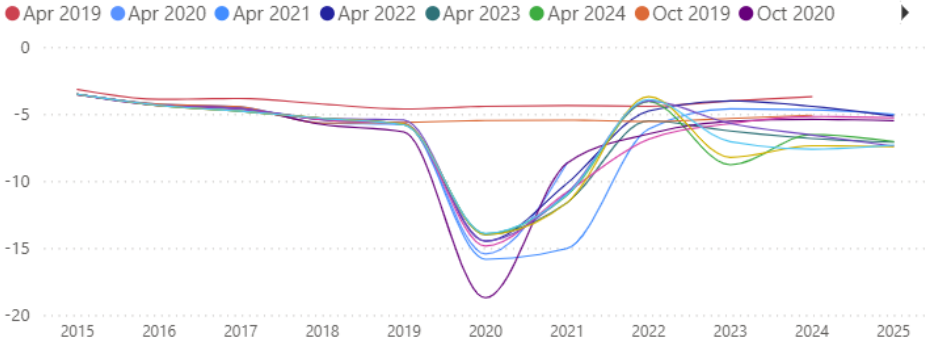
Government Revenue (%f GDP)



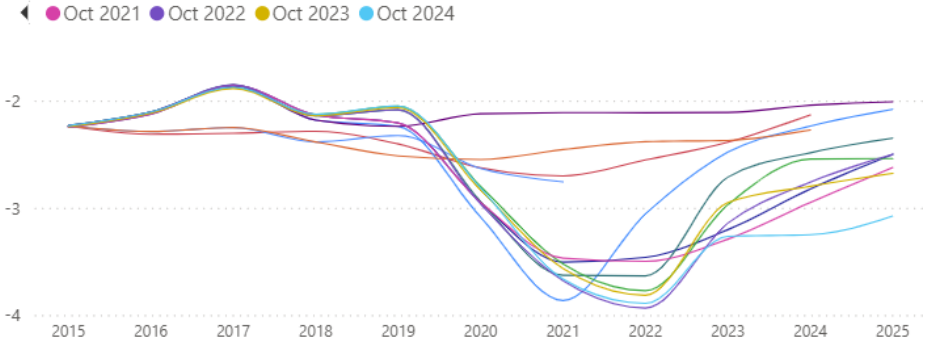
Government Expenditures (%f GDP)



Net Lending/Borrowing (%f GDP)

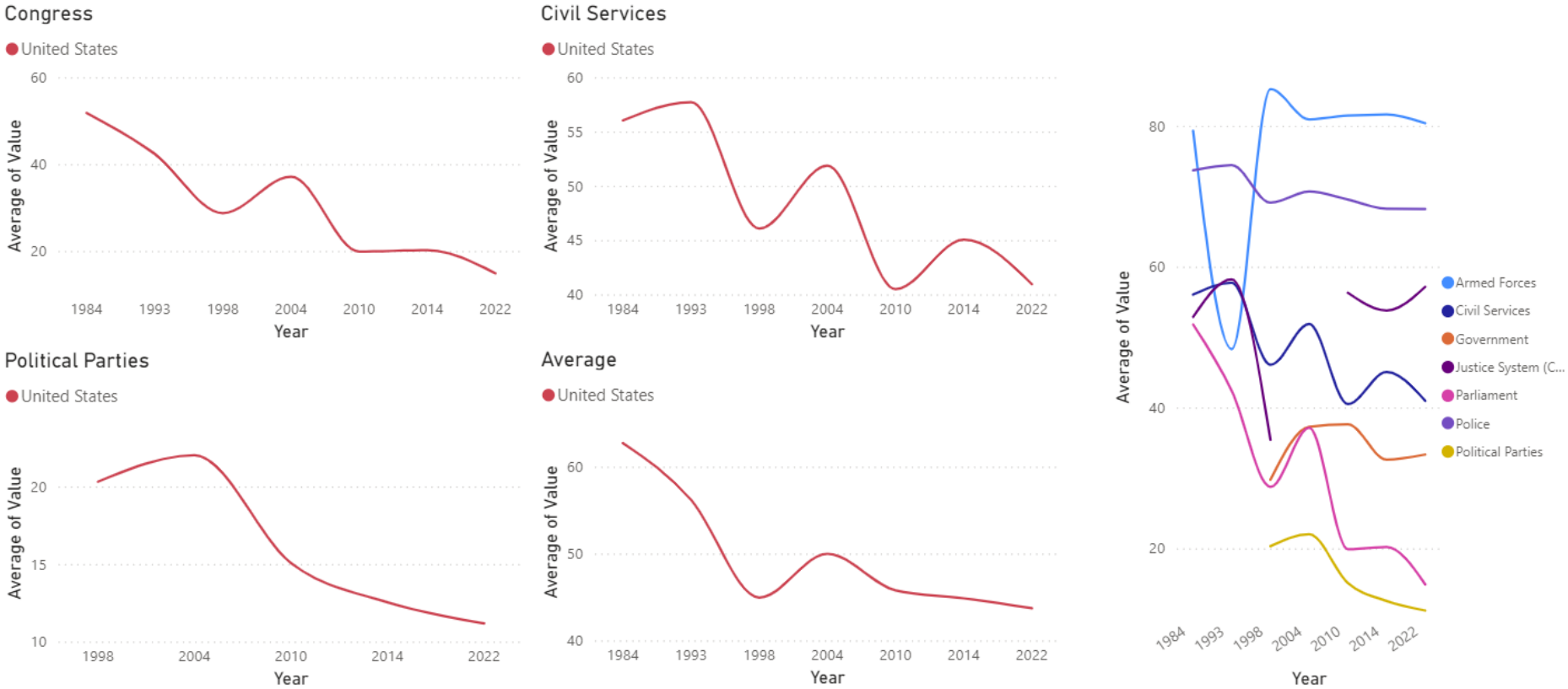


Current Account (%f GDP)



Trend Analys of Trust in US Institutions

Figure 166. Trends in Trust in US Institutions



Source: data from worldvaluessurvey.org. Note: Trust here corresponds to responding "trust completely" or "trust somewhat"