

4. Disclosing and Managing Fiscal Risks

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Outline

- Definition and categories of fiscal risks
 - Identifying and managing fiscal risks
 - Contingent liabilities
 - Specific risks emanating from PPPs and SOEs
-

Definitions

What are fiscal risks?

Fiscal risks are factors that may cause fiscal outcomes to deviate from expectations or forecasts.



"It was at this point, gentlemen, that reality intruded."

Can Governments Realistically Eliminate Risks?

- Not really.
- One could argue governments have an obligation to take on risks.
- Other argument is risk pooling
 - Market failures
 - Private costs/social benefits
 - Arrow-Lind theorem (1970)
 - *under certain assumptions, the social cost of the risk moves to zero as the population tends to infinity, so that projects can be evaluated on the basis of expected net benefit alone.*

Defining fiscal risks

Fiscal risks are factors that may cause fiscal outcomes to differ from expectations...

General economic risks

- * related to general economic forecast parameters
- * Examples: domestic demand shock; trade volume shock; commodity price shock

Specific fiscal risks

- * Difficult to isolate using general economic forecast parameters
- * Give rise or contribute to uncertainty about specific fiscal outcomes

Institutional risks

- * Constrain the effectiveness of fiscal risk management
- * Examples: lack of expenditure control; poor cash management; poor revenue collection

Contingent liabilities

- * Arise from the occurrence of a specific event

Other specific risks

- * Arise from changing conditions linked to a specific source
- * Examples: change in asset and liability values; tax avoidance; demographic change

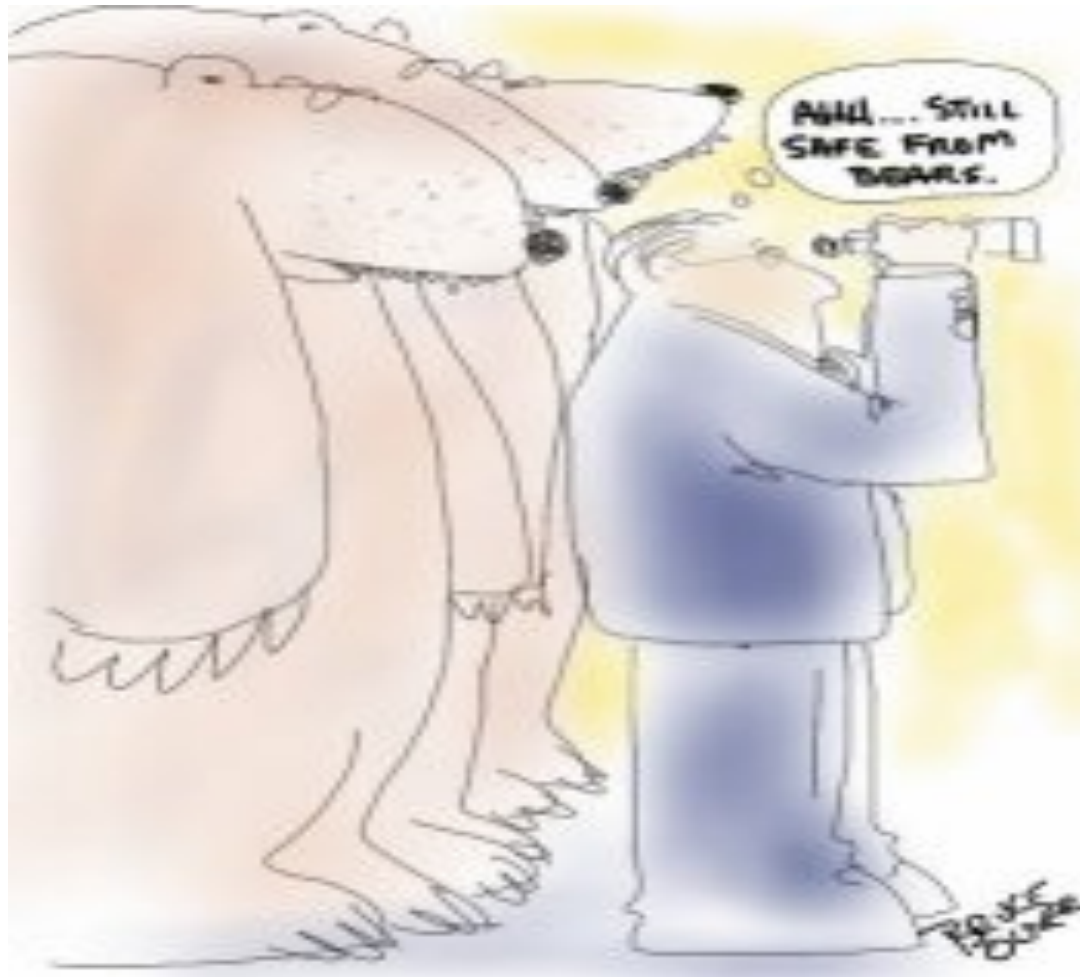
Explicit

- * Based on a firm legal obligation or declared policy
- * Examples: government guarantees; PPP related min. guarantees; deposit insurance; legal claims.

Implicit

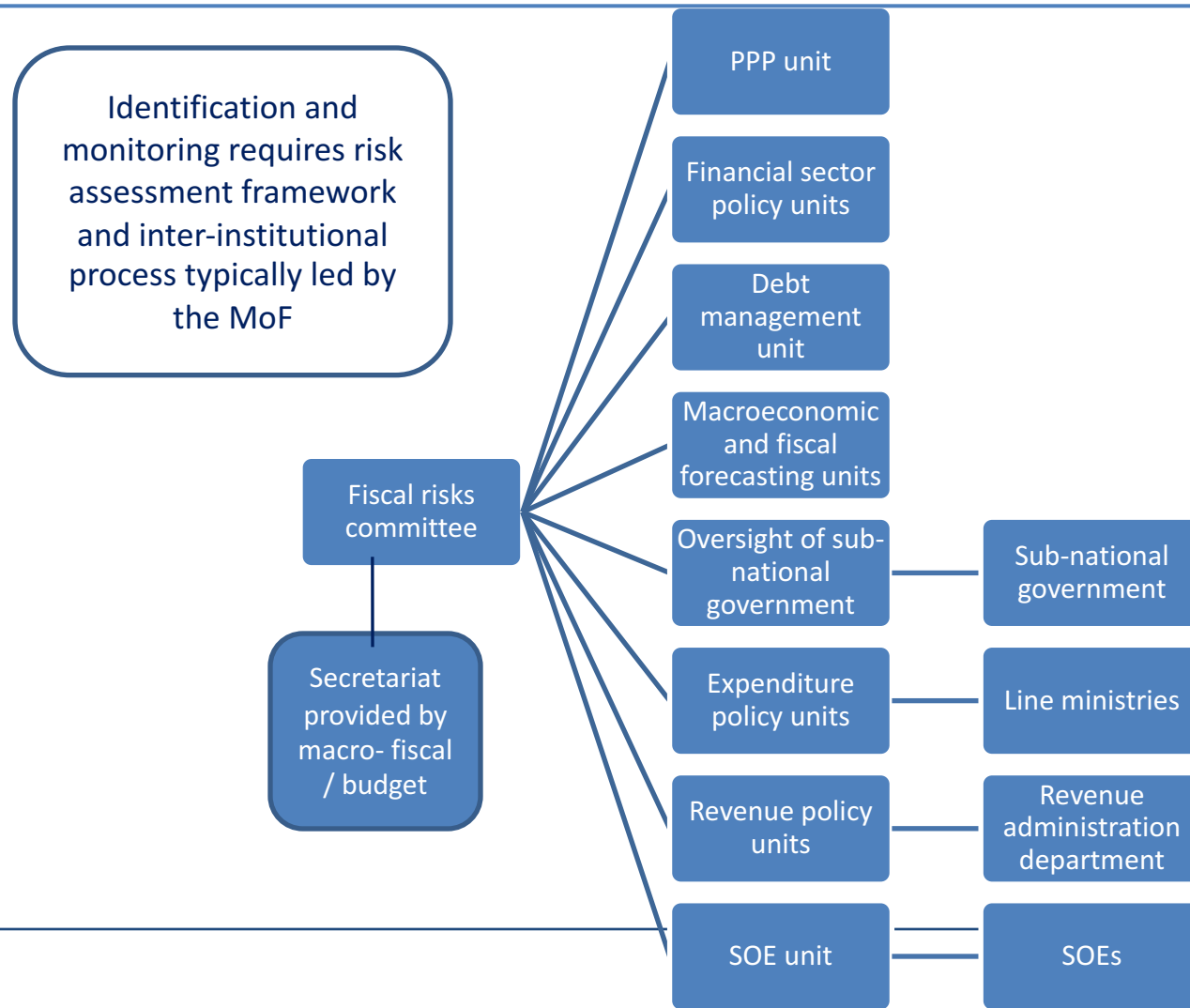
- * Based on expectation or pressure to provide support
- * Examples: failing PPP; bailouts of SOEs, banks, and sub-national government; natural disasters

How do we identify fiscal risks?



Identification and management

Identifying and analyzing fiscal risks



Economic and fiscal structures

Structures

Nature of the macro-economy

- Key sectors
- Linkages between sectors

Structure of the public finances

- Sources of revenue (tax / grants)
- Structure of expenditure
- Size and composition of debt

Structure of the public sector

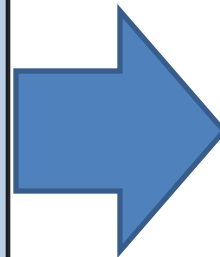
- Extra-budgetary funds
- Sub-national government
- State-owned enterprises

International position

- Trade
- External debt obligations
- Regional arrangements

Other structural issues

- Environmental risks
- Political risks



Risk factors

Concentration

- dependence on dominant sector

Volatility

- exposure to global commodity prices

Uncertainty

- likelihood of natural disaster occurring

Feedback mechanisms

- transmission of shocks between sectors

Inflexibility

- inability to adjust to shocks, eg non-discretionary spending

Framework for managing fiscal risks

Identifying and monitoring

- Establishing the context
- Identifying areas of risk
- Central coordination unit
- Information collection

Reporting

- Economic sensitivity analysis
- Public sector balance sheet
- Fiscal risk statement

Incorporating in budget

- Budget margins/reserves
- Stabilization funds
- Debt level
- Caps

Analyzing

- Economic sensitivity analysis
- Asset-liability assessment
- Valuing contingent liabilities

Mitigating

- Risk allocation strategy
- Institutional responsibility

Fiscal Risk Analysis and Management

Governments should disclose, analyze, and manage risks to the public finances and ensure effective coordination of fiscal decision-making across the public sector.

- Risk Disclosure and Analysis:
 - Governments should publish regular summary reports on risks to their fiscal prospects.
- Risk Management:
 - Specific risks to the public finances should be regularly monitored, disclosed, and managed.
- Fiscal Coordination:
 - Fiscal relations and performance across the public sector should be analyzed, disclosed, and coordinated.

Mitigating fiscal risks

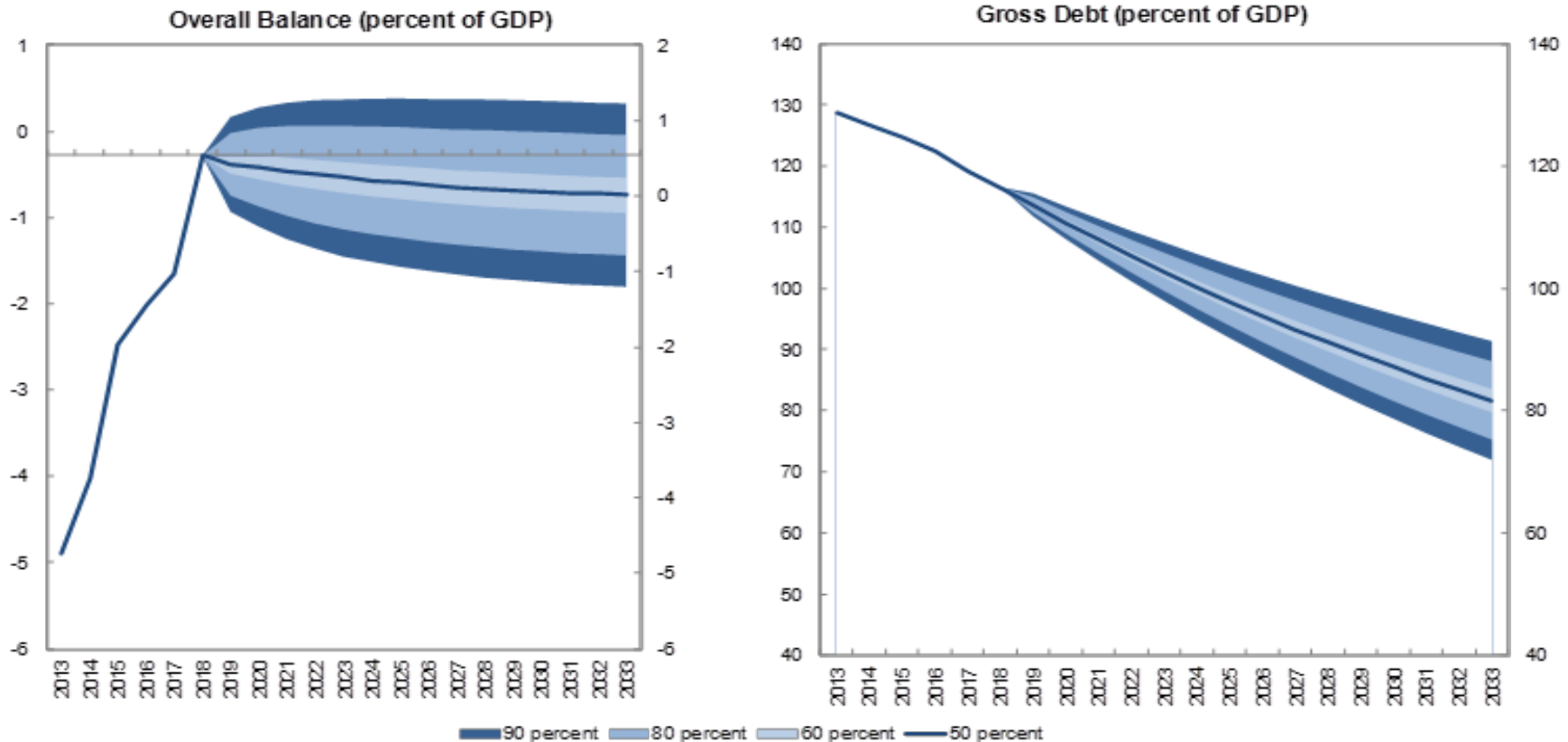
Government must first decide whether to bear the risk:

Pros: Public policy benefit (e.g. auto. stabilizers for stability; guaranteeing bank deposits to discourage runs)

Cons: Moral hazard, risk transfers are less transparent, solvency

Reduce probability of risk occurring	Reduce exposure to risk	Create fiscal space to absorb retained risk
<p>Controls on activities of public entities</p> <ul style="list-style-type: none"> ▪ Ceilings for guarantees (Netherlands, Czech Republic) ▪ Limits on liabilities or borrowings of local authorities <p>Incentivize behavior</p> <ul style="list-style-type: none"> ▪ Partial guarantees ▪ Charge risk related guarantee fees ▪ Reduce debt bias in the tax system <p>Regulate those benefiting from govt. risk-bearing</p> <ul style="list-style-type: none"> ▪ Financial sector regulation (e.g. capital requirements) 	<p>Market instruments</p> <ul style="list-style-type: none"> ▪ Disaster Insurance (Caribbean Catastrophe Risk Insurance Facility) ▪ Catastrophe bonds (Mexico earthquake bonds) ▪ Hedging instruments (Mexico oil price options) <p>Policy instruments</p> <ul style="list-style-type: none"> ▪ Regulating building codes to insulate against disasters ▪ Upper limits on disaster or deposit insurance schemes 	<p>Budget provisioning</p> <ul style="list-style-type: none"> ▪ Contingency reserves ▪ Expense expected cash flows for calls on CLs (Columbia, US) ▪ Prudent price assumptions (Chile) <p>Buffer funds</p> <ul style="list-style-type: none"> ▪ Natural Disaster Funds (NZ, Mexico, Turkey) ▪ Stabilization Funds (Chile) ▪ Deposit Insurance Funds (US) ▪ Guarantee Funds (Chile, Columbia, US, Sweden) <p>Fiscal headroom</p> <ul style="list-style-type: none"> ▪ Prudent debt limits (NZ)

Portugal: Stochastic Simulations



Source: IMF Staff Calculations

Notes: The fan chart shows 90 percent of the probability distribution of outcomes with the bands representing 10 or 20 percent of the probability distribution. Assumes structural balance rule is in place from 2019 onwards limiting the structural balance to -0.5 percent of GDP. The stochastic shocks are based on a vector autoregression of historical quarterly data for Portugal (1978-2013). We set long-term real potential growth at 1.6 percent and inflation at 1.5 percent. For more details see Caceres and Ruiz Arranz (2010).

Risk Management in Seven Areas

- **Budgetary Contingencies:**
 - The budget has adequate and transparent allocations for contingencies that arise during budget execution.
- **Asset and Liability Management:**
 - Risks relating to major assets and liabilities are disclosed and managed.
- **Guarantees:**
 - The government's guarantee exposure is regularly disclosed and authorized by law.
- **Public Private Partnerships:**
 - Obligations under public-private partnerships are regularly disclosed and actively managed.
- **Financial Sector Exposure:**
 - The government's potential fiscal exposure to the financial sector is analyzed, disclosed, and managed.
- **Natural Resources:**
 - The government's interest in exhaustible natural resource assets and their exploitation is valued, disclosed, and managed.
- **Environmental Risks:**
 - The potential fiscal exposure to natural disasters and other major environmental risks are analyzed, disclosed, and managed.

Incorporating risks in the budget

Buffers

- Low debt / Stabilization funds
- Contingency reserves / Margins

Budget flexibility

- Virements
- Supplementary budgets

Public sector fiscal planning

- Include SOE flows and stocks within fiscal projections, plans and objectives

Caps

- Create budget ceilings for contingent liabilities such as guarantees, PPPs etc

Incorporating in budget: Reserves

- The dilemma:
 - sufficient buffer to absorb justified uncertainty
 - maintain disciplining restriction in the budget
- Factors affecting the appropriate size:
 - time frame
 - Composition of expenditure
 - risk exposure
- 1-3 % of total expenditure is common practice
- Robust access criteria and approval process

Reporting: fiscal risks statements

Fiscal Risk Statement: Philippines

I	Fiscal Policy Objectives	1
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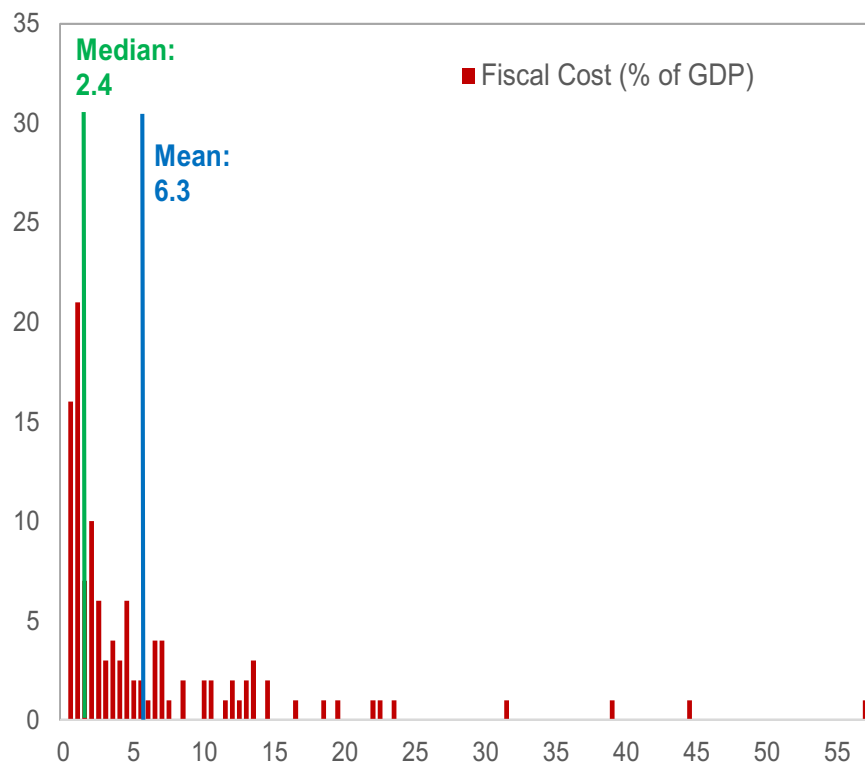
Contingent liabilities

Contingent Liabilities

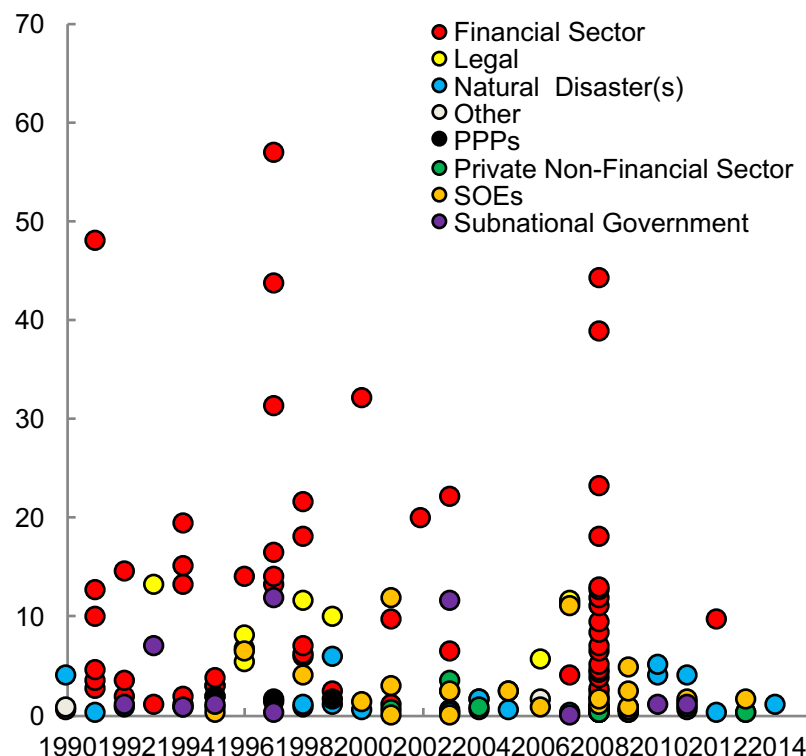
- **Potential claims** that may or may not be incurred depending on macroeconomic conditions and other events.
- Unlike direct liabilities, such as pension obligations, which are predictable and will arise in the future with certainty, contingent liabilities are obligations triggered by discrete but uncertain events.
- By nature, contingent liabilities are **difficult to measure**.
- - **Explicit liabilities** are those recognized by a law or contract, such as government guarantees for non-sovereign borrowing and obligations issued by subnational governments and public or private sector entities or trade and exchange rate guarantees.
 - **Implicit liabilities** are obligations that may be assumed by government due to public and interest-group pressures, such as financial sector bailouts, or bailouts of non-guaranteed social insurance funds.

Contingent liabilities: large, correlated, non-linear

- Distribution of Fiscal Costs of Contingent Liabilities Realizations (Percent of GDP)

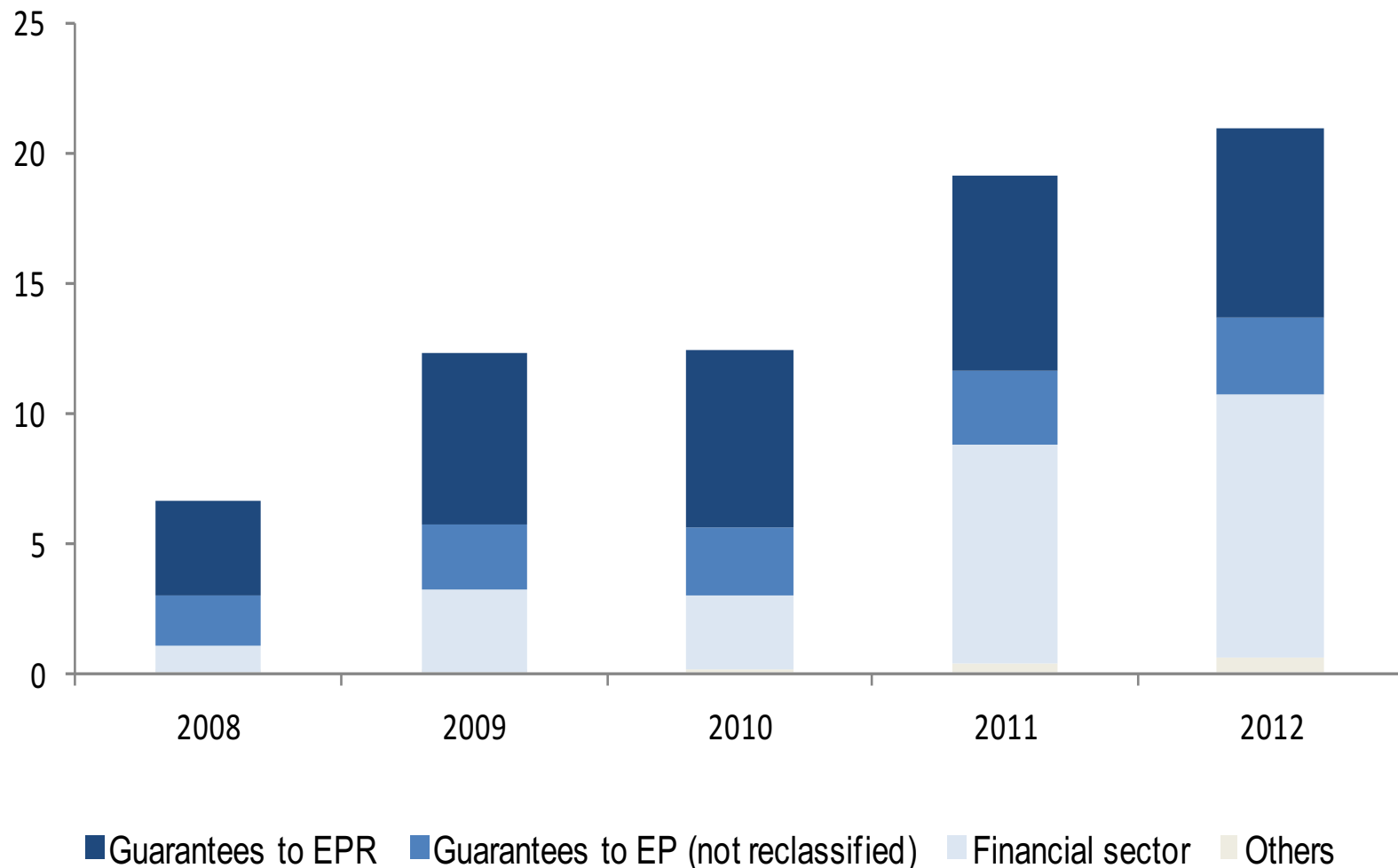


Fiscal Costs of Contingent Liabilities (Percent of GDP)

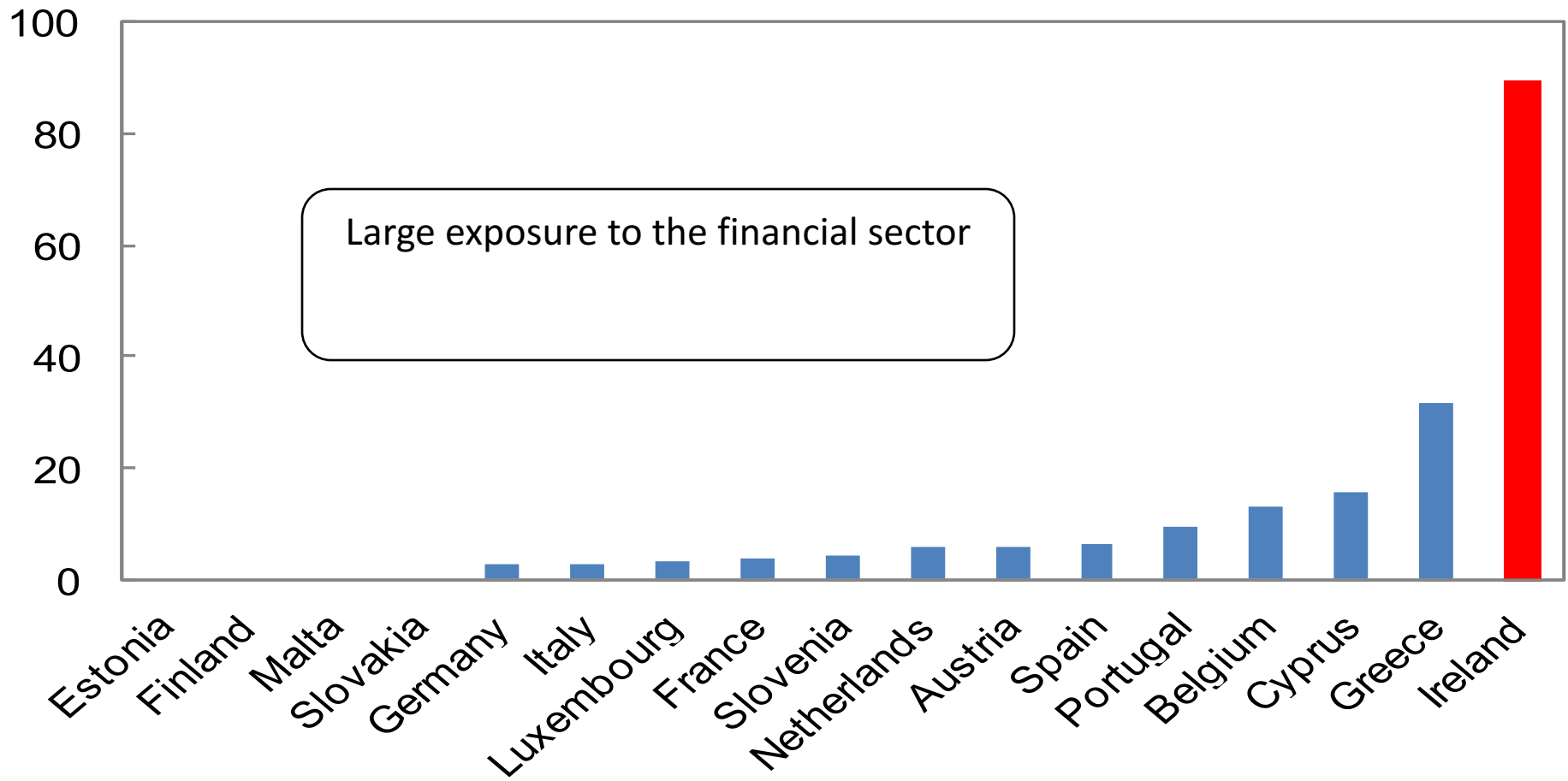


Note: 82 countries (34 AEs, 48 EMs) over 1990-2014, using broad definition of contingent liabilities (Ceborati and others, 2009). Consistent with evidence on skewed debt shocks in Gaspar and Escolano (2015).

Portugal: Central Government Guarantees, 2008-12



Ireland: Government Guarantees

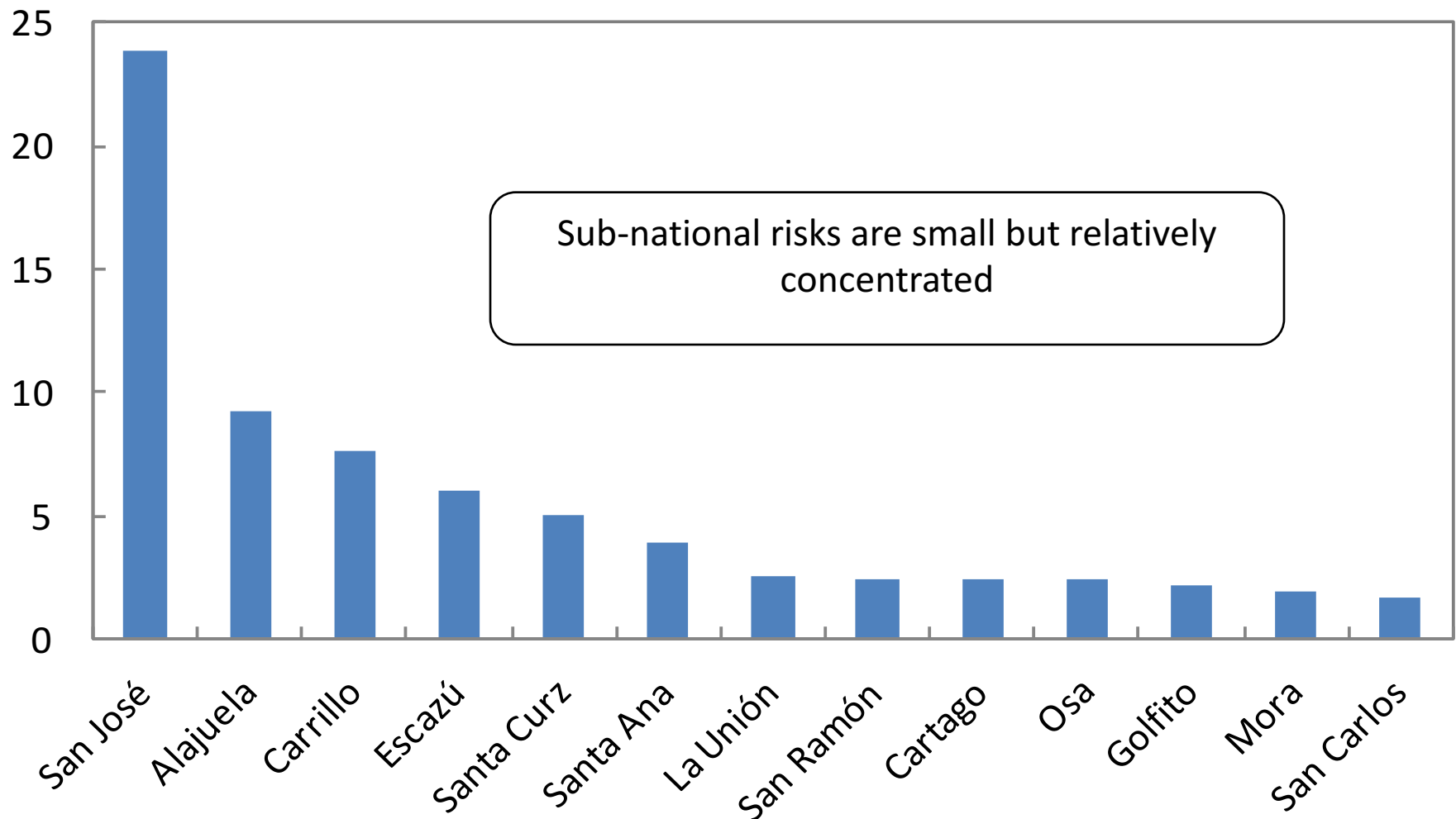


Fiscal coordination

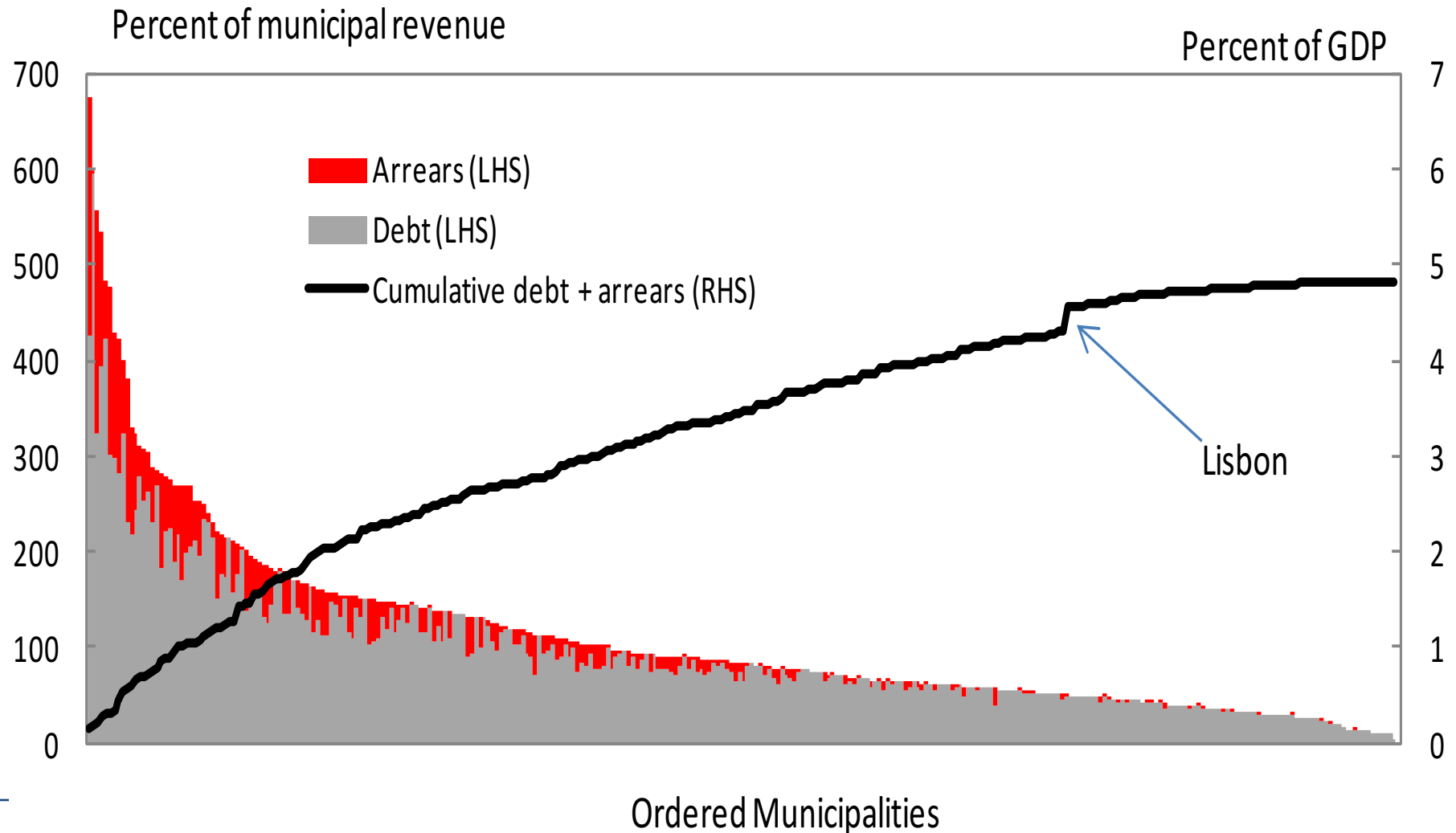
Fiscal Coordination

- Sub-National Governments:
 - Comprehensive information on the financial condition and performance of sub-national governments, individually and as a consolidated sector, are collected and published.
- Public Corporations:
 - The government regularly publishes comprehensive information on the financial performance of public corporations, including any quasi-fiscal activity undertaken by them.

Costa Rica: Distribution of Municipal Debt



PRT: Municipalities' Ratios of Liabilities and Arrears to Revenue



Managing Fiscal Risks from Public-Private Partnerships

Outline

- What are PPPs?
 - Why PPPs?
 - Why worry about PPPs?
 - Managing fiscal risks from PPPs
 - Concluding remarks
-

What are PPPs?

PPPs are...

Long-term arrangements where the private sector supplies infrastructure assets and services that traditionally have been provided by the government

- **Main characteristics**
 - Long term (25, 30, or more years, are common)
 - Private execution and financing of public investment
 - Joint contracting of design, construction, and maintenance
 - Risk transfer to private sector (performance-based contracts)

Types of PPPs

– Who pays for the contract?

- Government-funded (e.g. availability payments)
- User-funded (e.g. user fees, tolls)
- Combination

– Contractual vs. institutional

- Contract between public entity and private partner
 - Contract between a Special-Purpose Vehicle (SPV) and private partner
 - SPV, public or private entity?
-

Why do PPPs?

Good reasons: Potential increase in efficiency and VfM

- Containing cost overruns and delays
- Improving project design and quality of service
- Internalize maintenance strategy, thus protecting the value of the asset
- Redirect government focus *from* hiring/buying inputs and deciding on technologies and processes *to* defining public policies and expected outputs

Bad reasons: Circumvent annual spending limits and move debt off balance sheet

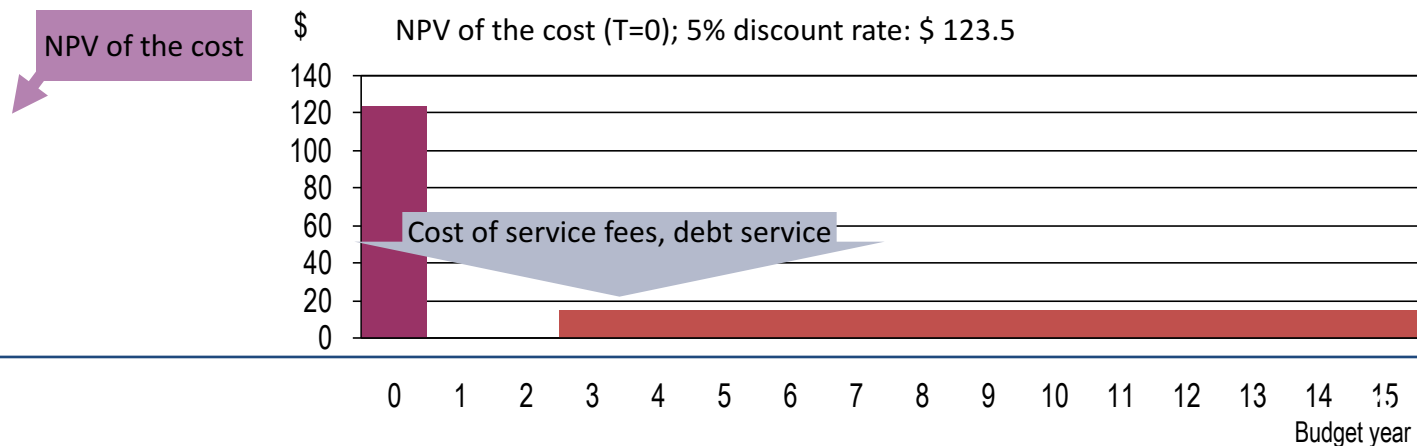
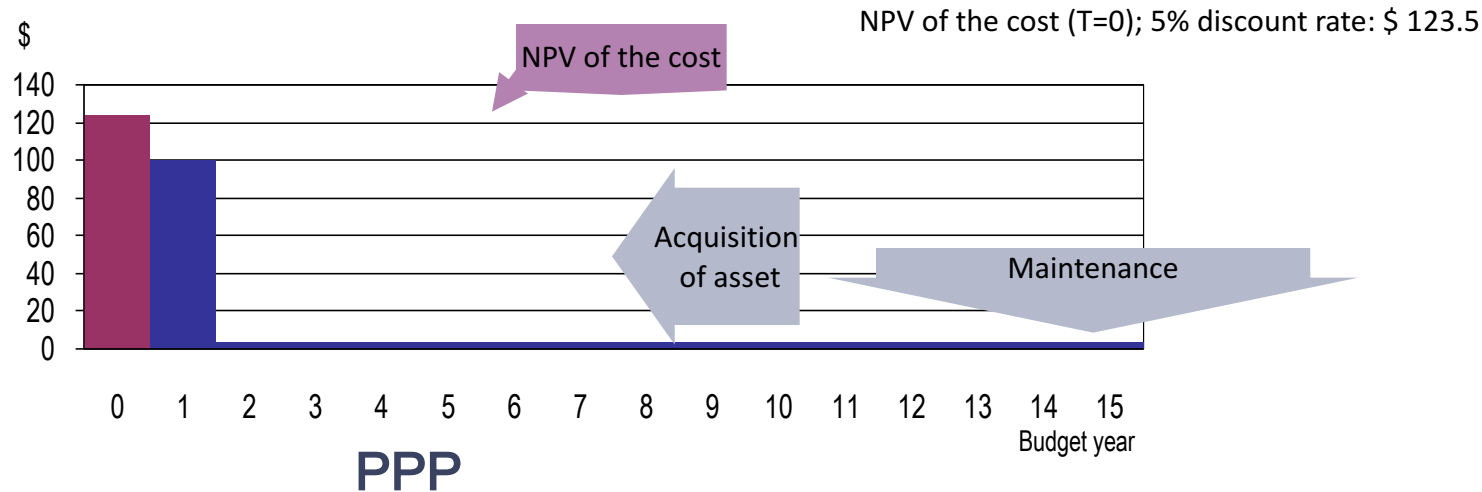
- Governments worldwide are struggling to close infrastructure needs
- PPPs tempting for cash strapped governments trying to meet fiscal targets
- Allow governments to defer spending without deferring benefit

Infrastructure “for free”?

- Tempting, particularly for cash strapped governments trying to meet fiscal targets
- Do they really offer infrastructure “for free”?
- Short-term vs. medium-term perspective of *“fiscal space”*
 - **PPPs do not create fiscal space “per se”**
 - **Only good PPP projects “may” create fiscal space “if” efficiency gains are larger than higher financial and transaction costs**

Why do PPPs? Cash flow vs. NPV

Government procurement

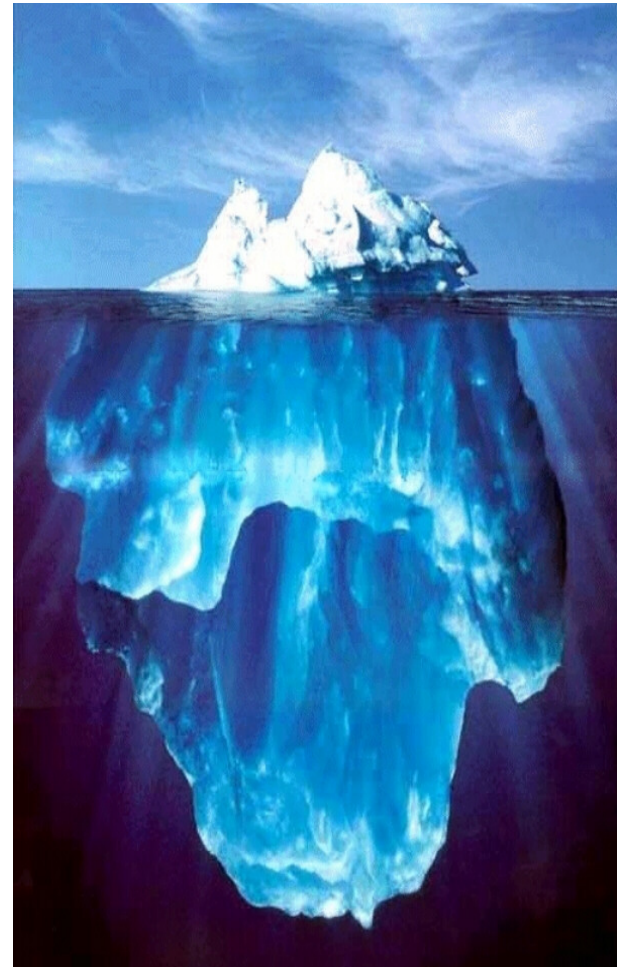


Why worry about PPPs?

Fiscal icebergs

Fiscal costs and risks from PPPs are potentially large

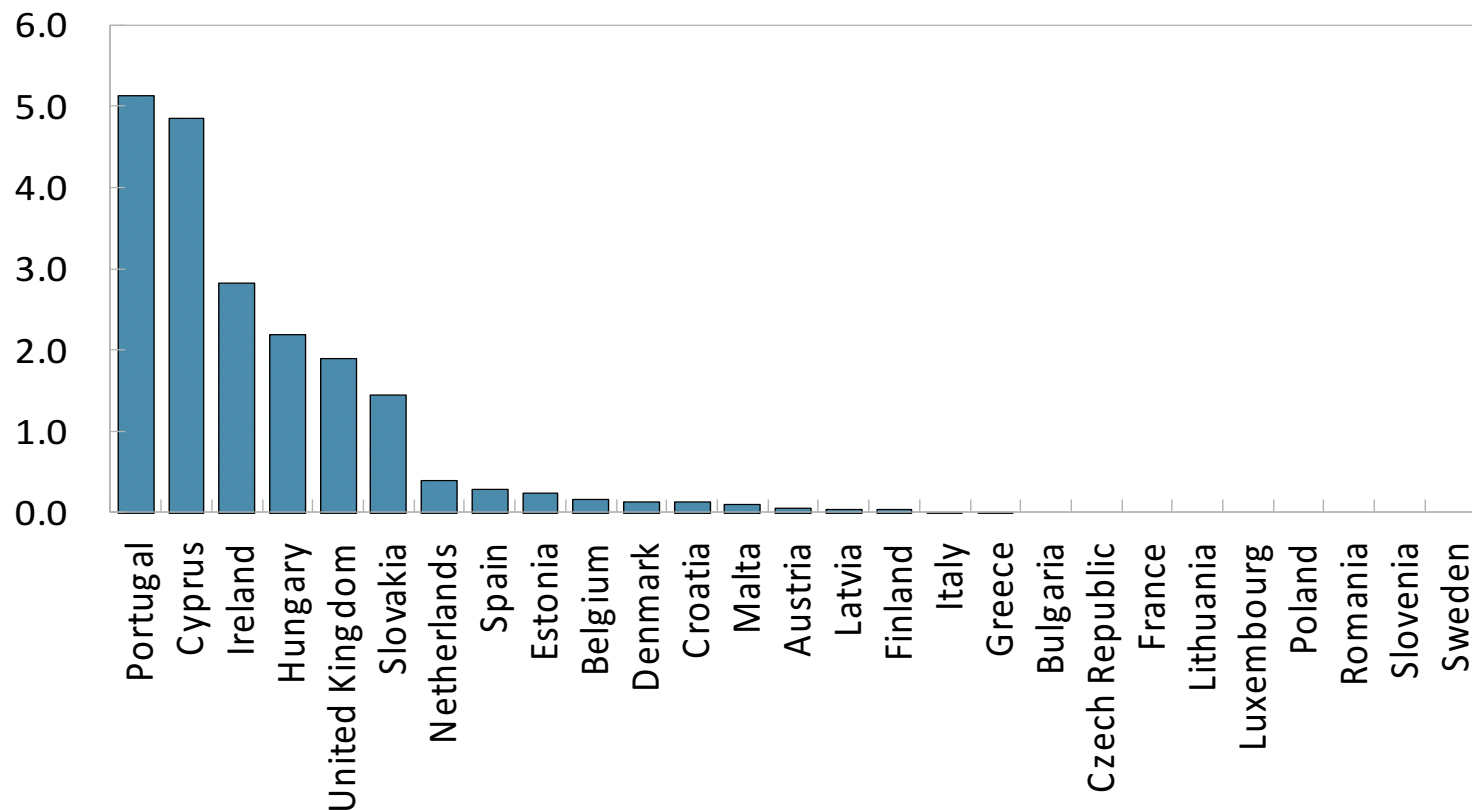
- Governments tend to use PPPs to bypass fiscal constraints
- Governments tend to treat PPPs outside budget cycle/MTFF, threatening the integrity of budget process
- PPPs reduce budget flexibility by committing public fund in long-term contracts, and
- PPPs create *firm* “and” *contingent* liabilities.



Off balance sheet items

PPPs Liabilities Off-balance Sheet, EU 2013

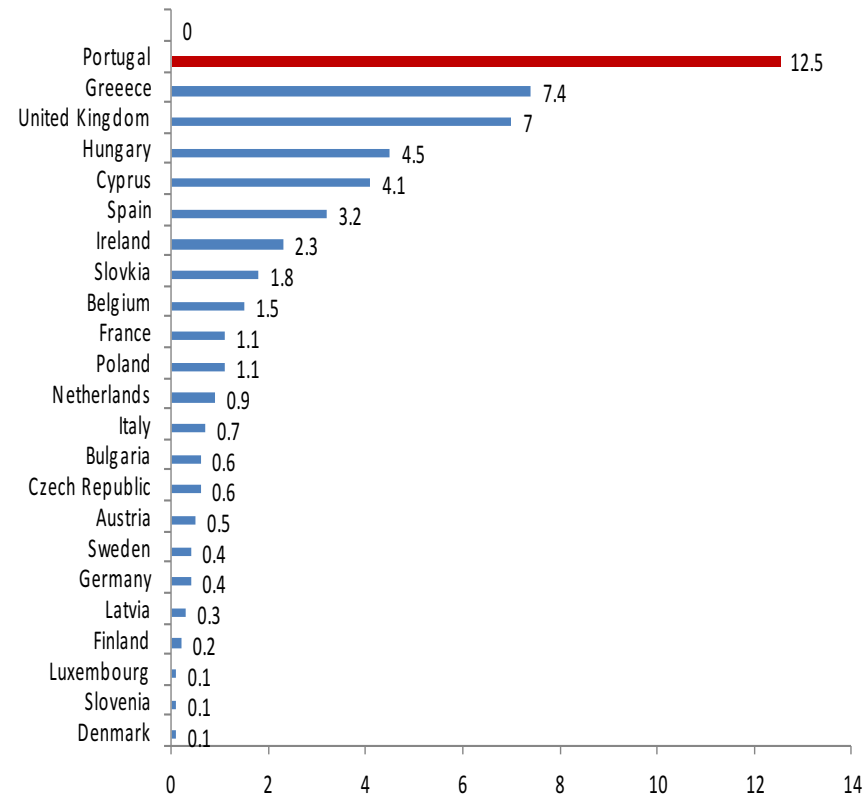
(In % of GDP)



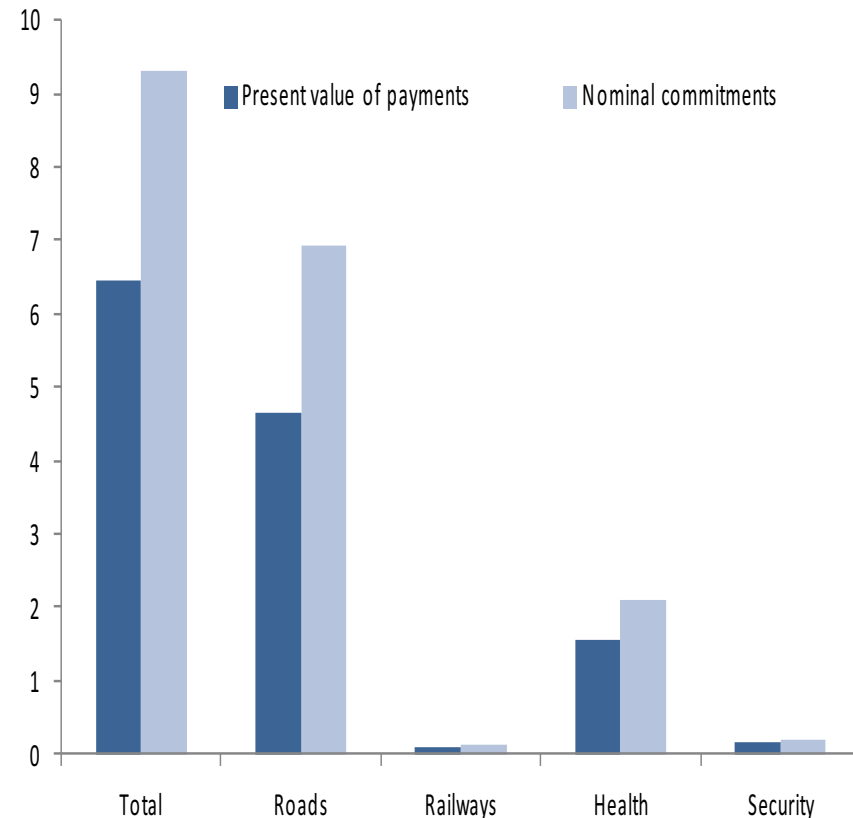
Sources: EUROSTAT

PPPs Portfolio

Cumulative Investment in PPPs,
1990-2011
(Percent of GDP)



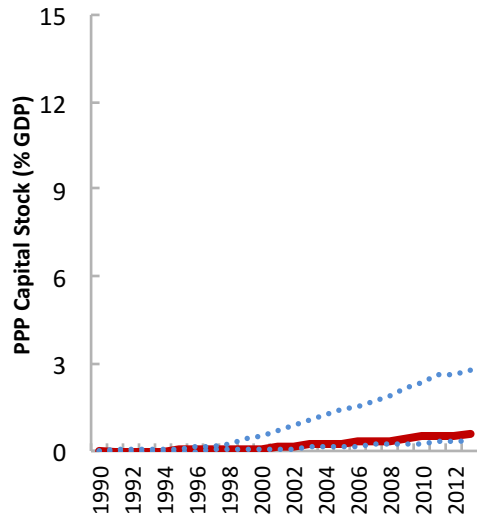
Estimated Size of PPPs in Portugal,
2013-41
(Percent of GDP)



Rising use of PPPs

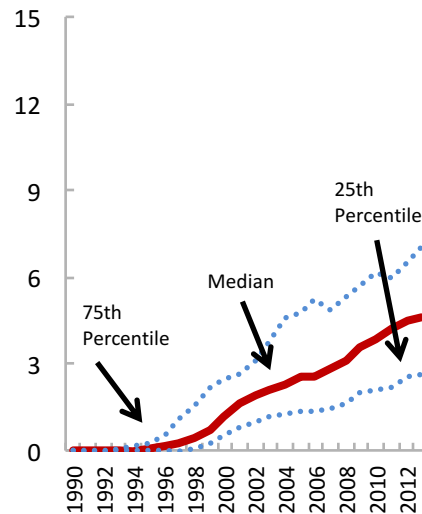
- Advanced

n= 16



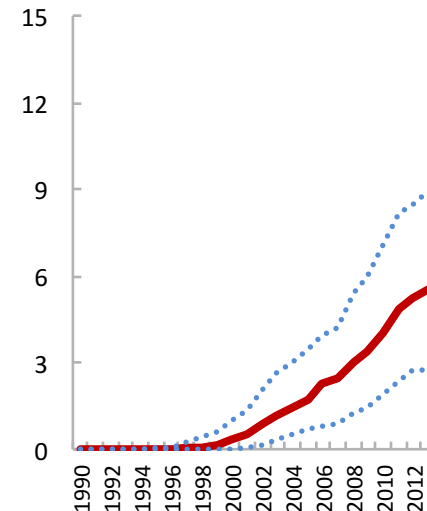
- Low Income

n= 73



- Emerging

n= 54



Sources: European Investment Bank; World Bank; and IMF staff estimates.

What does the experience show?

- Renegotiations are common and frequent, and they tend to favor private-sector operators
 - automatic pass-through to tariffs of increases in cost; delays and decreases in private sector investment , etc.
 - Weak monitoring capacity across the public sector
 - Weak role of the Ministry of Finance (i.e., budgetary authority) as the gate-keeper of public finances
 - Lack of integration of PPPs in budgetary process
 - Lack of transparency in fiscal reporting
 - PPPs gradually pushed outside the general government
 - State-owned enterprises, parastatals, etc.
-

What determines success in PPPs?

- Efficiency gains + effective mitigation of fiscal risk
- Governments can control these factors by:
 - Good projects
 - Good institutions
 - Good laws
 - Good fiscal accounting and reporting

Good projects → Require adequate public investment planning, project selection, implementation, and monitoring

- **Common problems in budgeting for public investment**

1. Determine how many public resources allocate to investment
2. Select the most beneficial investment projects
3. Ensure that investment projects have the expected impacts

Good institutions

Good institutions → The Ministry of Finance has to establish a validation process (“gateway process”) to look into problems:

... **poor value for money; current budget constraints; any threat to macroeconomic stability**

- Each step has to be validated by MoF (planning, preparation, tendering, negotiation, contract awarding and renegotiation)
- A PPP specialized entity is needed in the Ministry of Finance
 - ... to assist the MoF in ensuring that PPP are only pursued when they are affordable and not jeopardized fiscal sustainability

The need for a **specialized PPP entity** in the Ministry of Finance does not preclude other specialized entities at other levels of government

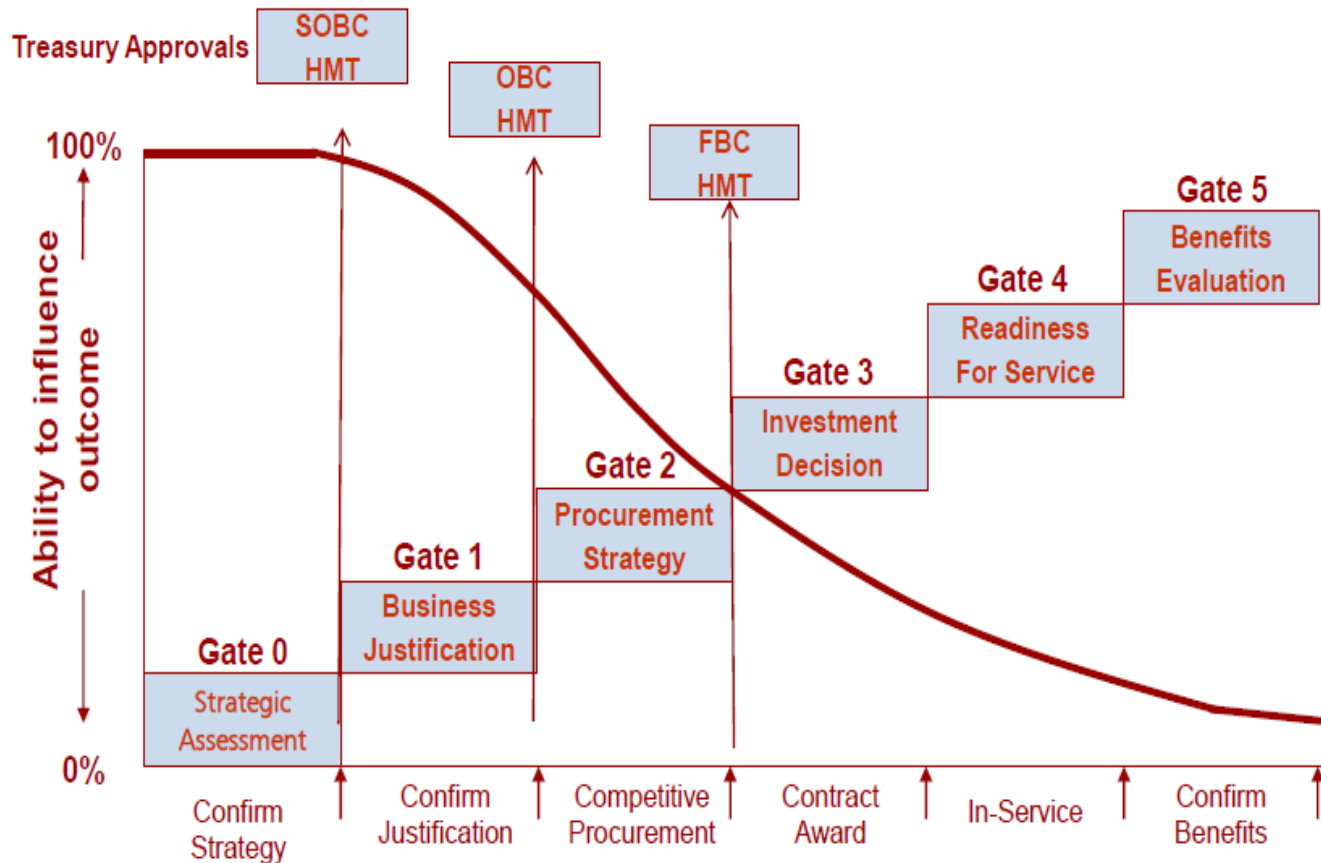
- PPP specialized entities can have various forms and roles
 - ... be the focal point for acquiring, developing, and sharing knowledge (**center of excellence, standardization of contracts and procedures, advisory role** to procuring agencies, etc.);
 - ... be the **sole contact point for the private sector** (promotion within international and domestic investors, coordination of communication strategy, etc);
 - ... be **responsible of risk assessment** to properly evaluate the implications of PPP contracts → **This role should be retained at the MoF**

A “gateway” process for PPPs

Tasks of the PPP Unit for advising the MoF on approval/rejection of PPP projects		
Phase 1: Planning	1	Checks pre-feasibility, Value for Money (VfM), and budget affordability of project concept
Phase 2: Feasibility	2	Checks feasibility, VfM, and budget affordability of business case
Phase 3: Tendering	3	Reviews tendering document to ascertain VfM and budget affordability
Phase 4: Bidding, negotiation and contract signing	4	Reviews contract to ascertain VfM and budget affordability
Phase 5: Construction and Operation	5	Monitors project implementation, budget implications
	6	If contract renegotiation, ascertains VfM and affordability

Good institutions

Infrastructure UK: Key Stages—Approvals and Assurance



Managing Fiscal Risks

Good laws

Good laws → For PPPs to be successful, there must be a sound legal framework which:

- ... establishes a legal environment that is clear, fair, predictable, and easily accessible; and
- ... gives the private sector assurance that the public sector will honor its commitments

- It is less common for PPPs to be renegotiated if the framework for setting them up and implementing them is laid down in legislation (for which the renegotiation rate is 17%), rather than by ministerial decree (28%) or under a PPP contract alone (40%)

Legal Framework

Good laws → A robust legal and regulatory framework

- Introduces a clear and consistent PPP law and/or harmonizes existing laws to provide a consistent legal framework
- Clarifies roles and responsibilities (e.g., across different ministries and levels of government)
 - In particular, the role of MoF should be clearly stated, giving the MoF the mandate to administer the PPP “gateway process”

Good accounting and reporting

Good fiscal accounting & reporting → Need to integrate accounting/reporting and good budgetary planning, selection, and approval procedures

- **The issue**
 - since the long-term costs of PPPs are not reflected in the budgetary approval process, there is a bias in favor of selecting PPPs instead of projects implemented with traditional public procurement
- **Best practice (Victoria State of Australia approach)**
 - any agency interested in PPP project **must first seek approval** for the capital spending that would be needed **as if the project were to be financed publicly**
 - **If a PPP is used**, the approved spending is converted into spending on the PPP's service payments during the operation phase of the project

Fiscal Risks from State-Owned Corporations

Outline

- The Public Corporations Sector
- Sources of fiscal risks from PCs
- Quasi-fiscal activities
- Strategies for reducing risks
- Reporting of risks
- Concluding remarks

The Public Enterprise Sector

- GFSM2001 defines sub-sectors of the public sector:
 - Nonfinancial public corporations (enterprises): delivering services such as electricity, communications, transport, water
 - Financial public corporations: banks, and non-bank institutions - insurance companies, pension funds
 - The Central Bank
- Boundary with government sector: Public Enterprises have sales revenues more than 50% of expenses
- Boundary with private sector: government control and authority to direct

Managing SOEs fiscal risks

Context

- Public Enterprise sector as % GDP
- Financial Public Corps as % GDP
- Types of public enterprise

Identifying and monitoring

- Risk assessment framework
- Central coordination unit
- Information collection/consolidation

Reporting

- Economic sensitivity analysis
- Public sector balance sheet
- Fiscal risk statement

Analyzing

- Economic sensitivity analysis
- Asset-liability assessment
- Valuing contingent liabilities

Incorporating in budget

- Debt level
- Budget margins/reserves
- Budget for contingent liabilities
- Stabilization funds
- Privatization funds

Mitigating

- Risk allocation strategy
- Institutional responsibility

Sources of Fiscal Risks from SOEs

- Some SOE debt may be explicitly guaranteed
- All SOE debt subject to perception of implicit guarantee by SOE managers and creditors etc...
- Fluctuations in taxes, royalties, dividends
- Fluctuations in value of equity
- Requirements for capital from government for new investment (on-lending, or capital injections)
- Requirements for operating subsidies
- Requirements for periodic bail-outs, perhaps due to QFAs
- Lumpy one-off receipts from privatizations
- Reclassifications of entities
- Opportunities for 'creative accounting'

Factors that increase risk

- Fiscal risks from SOEs tend to be greatest when:
 - The need to improve public services is great
 - Financial sector is underdeveloped
 - The central government is trying to reduce its own debt and deficit
 - Used to deliver political patronage and rents
 - They operate with little government oversight
 - There is an economic downturn
 - The political will to liquidate inherited SOEs which are bankrupt or close to being bankrupt

Quasi-fiscal activities

Definition and identification

- **QFA:** where a corporation conducts a non-commercial activity on behalf of government for which it is not compensated.
- **Four broad types of QFA:**
 - i. Operations relating to commercial enterprises, e.g. charging below commercial prices; delivering social services
 - ii. Operations related to the financial system, e.g. subsidized lending, directed lending
 - iii. Operations related to the exchange and trade system, e.g. multiple exchange rates, exchange rate guarantees
 - iv. Operations related to the private sector, e.g. resources for infrastructure projects

Reporting of QFAs

- One of the weakest areas of fiscal transparency
- QFAs often hidden inside SOE accounts, sometimes reported in SOE Annual Reports
- Four groups of countries:
 - I. One or two countries assessed in Open Budget Survey as publishing extensive information e.g. Chile
 - II. Countries that have started to eliminate some QFAs by paying budget subsidies e.g. Indonesia, France
 - III. Very small number of countries that conduct no material QFAs e.g. NZ
 - IV. The rest: no move to reduce QFAs, and no disclosure

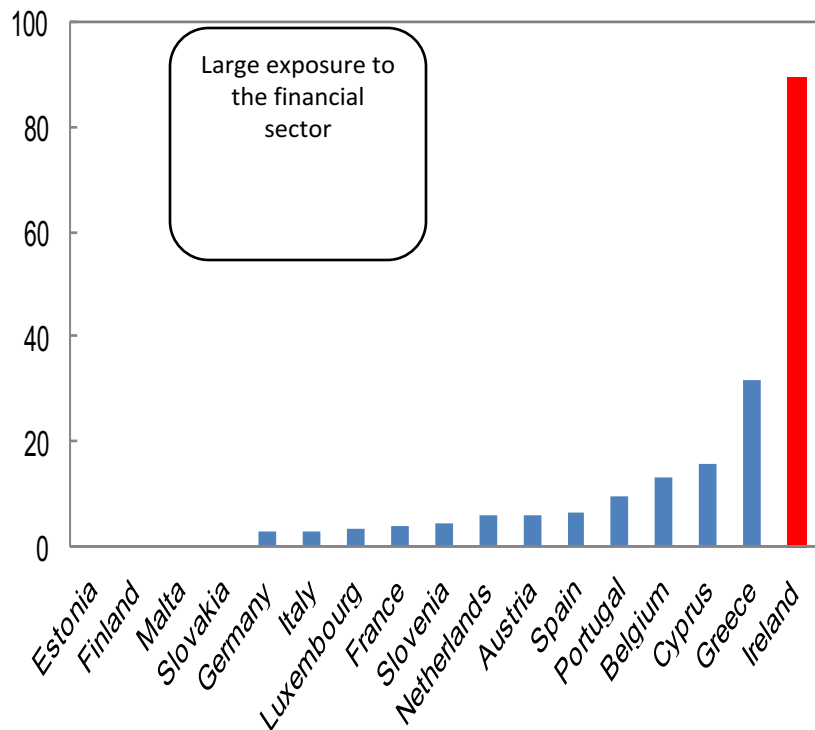
Pro-active monitoring of fiscal risks from SOEs

- The central finance agency (and central bank for FPCs) should be pro-active in monitoring fiscal risks:
 - ❑ Routine and regular internal monitoring reports to decision-makers on financial performance and financial position of individual SOEs
 - ❑ Reports to contain information, analysis, recommended actions to reduce risks
 - ❑ Reports submitted to senior officials with necessary authority to act
 - ❑ Where decision-makers have not taken action to mitigate a significant risk, monitoring reports continue to highlight the risk and its possible escalation

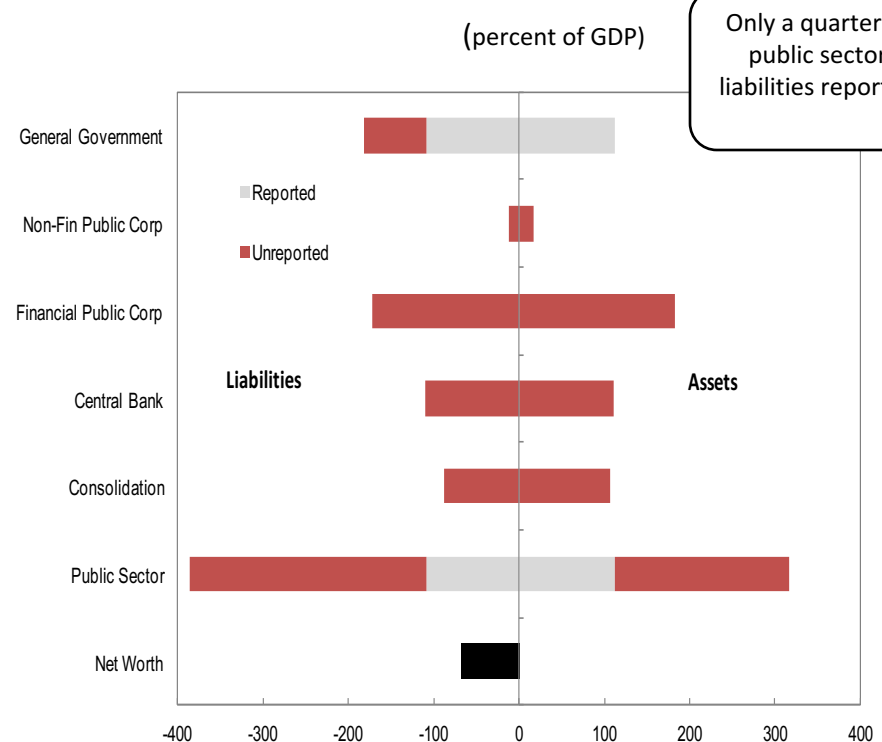
Reporting fiscal risks

IMF assessment of Ireland

Contingent liabilities: guarantees to the financial sector
(percent of GDP)



Assets and liabilities: Public sector balance sheet



Country practices on disclosure of fiscal risks from SOEs

- Open Budget Survey:
 - **2010 survey:** 15 out of 94 countries published extensive information on transfers to SOEs while 27 countries none
 - **2015 survey:** 21 out of 102 countries published extensive information on transfers to SOEs, while 26 published none
- Explicit government guarantees disclosed in Notes to the Financial Statements for countries which follow IPSAS
- Handful of advanced countries, and most of Latin America, publish fiscal statistics covering entire public sector
- Some countries publish annual overviews of SOE sector, e.g. France
- Published FSAP reports include disclosures on public financial corporations
- 42 countries reporting on extractive industries in compliance with EITI standards

Conclusions

- Fiscal risks cannot be avoided...
-but rather identified and disclosed, even qualitatively.....
- ...so as to be minimized and managed....
- It requires a 360 view across nature of potential risks.....
-and their covariance....
- Important if the first step...the others will follow

Selected references

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