

## TRADE LIBERALISATION AND FISCAL RISKS: INTERNATIONAL MANAGEMENT MECHANISMS AND LESSONS FOR UZBEKISTAN

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### Abstract

This thesis examines the nature, typology, and management mechanisms of fiscal risks arising in the context of trade liberalisation, with particular reference to countries that have acceded to the World Trade Organisation (WTO). Drawing on the comparative experience of Georgia, Chile, Malaysia, and Kazakhstan, the study identifies and analyses four principal categories of fiscal risk — revenue, structural, cyclical, and institutional — and evaluates the international instruments deployed to manage them. On the basis of this comparative analysis, targeted fiscal policy recommendations are derived for Uzbekistan as it advances its WTO accession process. The findings indicate that proactive fiscal risk management — combining budgetary rules, stabilisation funds, and sequenced tax reform — can substantially mitigate the adverse budgetary consequences of trade liberalisation when these instruments are applied in a coordinated and mutually reinforcing manner.

**Keywords:** trade liberalisation, fiscal risks, budget sustainability, WTO accession, fiscal risk management, Uzbekistan

### 1. Introduction

Trade liberalisation occupies a central position in contemporary economic policy, offering the prospect of expanded trade volumes, enhanced economic efficiency, improved international competitiveness, and a more attractive investment climate. Yet this process simultaneously generates a range of fiscal risks: the rapid contraction of customs revenues, the growing exposure of public finances to external shocks, and the increased complexity of maintaining budgetary balance during the transition period.

According to the WTO's own statistical data, the simple average most-favoured-nation (MFN) tariff rate applied by WTO members declined from 13.2 per cent in 1996 to 7.4 per cent in 2021 — a reduction of 44 per cent (WTO, 2023). The trade-weighted effective tariff rate fell even more sharply, from 6.8 per cent to 2.5 per cent over the same period. For developing and transition economies — which have historically derived between 20 and 45 per cent of total government revenues from customs duties — this structural decline has generated severe fiscal pressure, as the customs revenue base has contracted substantially through the liberalisation process (Baunsgaard & Keen, 2010; IMF, 2022).

Uzbekistan initiated its WTO accession negotiations in 2019 and formally reactivated them in 2020; the country currently stands at the threshold of assuming binding tariff reduction commitments (WTO, 2023). This juncture brings both significant economic opportunities and material fiscal risks. The proactive identification, assessment, and management of these risks is therefore a matter of strategic importance for Uzbekistan's fiscal authorities.

The present thesis addresses the following research questions:

- What categories of fiscal risk does trade liberalisation generate, and how may they be systematically classified?

- What management mechanisms have been employed in international practice, and how effective have they proved?
- What lessons does the experience of successful countries offer for Uzbekistan?
- What specific policy instruments are recommended to minimise fiscal risks in the Uzbek context?

## **2. Literature Review**

### **2.1. The Theory of Fiscal Risk: Concepts and Classification**

The theoretical foundations of fiscal risk analysis were established in the work of Tanzi and Schuknecht (2000), who defined fiscal risk as “any factor that may produce an unplanned adverse effect on the budget.” This foundational definition was subsequently elaborated and operationalised by Hemming et al. (2003), who proposed a tripartite classification of fiscal risks: macroeconomic risks, contingent liabilities, and systemic fiscal risks. This taxonomy has provided the dominant analytical framework for subsequent empirical work on fiscal risk identification and management.

In the specific context of trade liberalisation, Calvo and Reinhart (2002) analysed the empirical relationship between volatile capital flows and budgetary stability, demonstrating that trade and financial external shocks are capable of reducing budget revenues by up to 2–4 percentage points of GDP (Calvo & Reinhart, 2002). This finding underscored the potentially rapid and large-scale fiscal consequences of external trade disturbances.

Aizenman and Jinjarak (2009) examined the relationship between trade openness and fiscal revenues in developing economies, demonstrating that trade liberalisation can assist in broadening the domestic tax base. However, they also showed that greater openness is associated with a stronger correlation between economic cycles and budget balances — implying that trade liberalisation may simultaneously amplify the cyclical dimension of fiscal risk (Aizenman & Jinjarak, 2009).

### **2.2. Fiscal Risk Management Mechanisms: International Experience**

The IMF’s Fiscal Risk Management framework (2016) identifies three principal categories of management instrument: (i) fiscal rules — statutory constraints on budget deficits and public debt; (ii) stabilisation funds — mechanisms designed to smooth revenue volatility; and (iii) stress tests — scenario-based assessments of budgetary resilience to adverse shocks. The IMF’s comparative analysis demonstrates that these instruments deliver substantially greater fiscal stabilisation benefits when deployed in combination than when applied individually (IMF, 2016).

Frankel et al. (2013), examining the experience of 94 developing economies, found that countries which successfully implemented countercyclical fiscal policies recovered more rapidly from trade shocks. Their analysis identified fiscal rules anchored to structural budget balance targets as the most reliable institutional mechanism for preserving budgetary stability in the context of trade liberalisation (Frankel et al., 2013).

### **2.3. The Uzbekistan Literature Gap**

The existing literature on Uzbekistan’s fiscal system has developed principally along two lines: general budget analysis and fiscal sustainability assessments (ADB, 2023; World Bank, 2022), and evaluations of tax reform trajectories (Tashkentov et al., 2021). Empirical studies specifically examining the fiscal risks associated with trade liberalisation in the Uzbek context

remain largely absent from the literature (Yusupov, 2022). The present thesis addresses this gap.

### 3. Fiscal Risks of Trade Liberalisation: Taxonomy and Characterisation

#### 3.1. Four Principal Categories of Fiscal Risk

Drawing on comparative international experience and the theoretical literature, the following taxonomy of fiscal risks specific to trade liberalisation is proposed (based on IMF, 2016; Hemming et al., 2003; Baunsgaard & Keen, 2010):

**Table 1. Taxonomy of Fiscal Risks Associated with Trade Liberalisation**

Risk Category	Nature	Transmission Mechanism	Severity
1. Revenue Risk	Rapid and sharp contraction of tariff receipts	Tariff reduction → customs revenue declines	High
2. Structural Risk	Unanticipated changes in economic composition	Import competition displaces domestic production → shrinks tax base	Medium–High
3. Cyclical Risk	Amplification of budget cyclicality through trade shocks	Export price decline → budget deficit widens	Medium
4. Institutional Risk	Administrative weakness in deploying compensatory taxes	Domestic taxes fail to compensate for lost tariff revenue	Medium–High

Source: Author's synthesis based on IMF (2016), Hemming et al. (2003), and Baunsgaard & Keen (2010).

#### 3.2. Quantifying Revenue Risk: An Analytical Framework

Revenue risk represents the most immediate and directly measurable fiscal hazard associated with trade liberalisation. Drawing on the methodology of Baunsgaard and Keen (2010), it may be expressed through the following analytical relation:

$$FR_{revenue} = \Delta TAR \times M_i \times (1 - \eta)$$

where  $\Delta TAR$  denotes the change in the tariff rate;  $M_i$  is the import volume for commodity  $i$ ; and  $\eta$  is the price elasticity of import demand. For goods with high price elasticity — consumer durables, electronics, processed foodstuffs — revenue risk is particularly acute: import volumes expand rapidly following tariff reduction, but the resulting customs revenue contraction cannot be offset by volume gains alone. This relationship underscores the importance of commodity-level revenue risk disaggregation in fiscal planning for WTO accession (Keen & Ligthart, 2002).

### 4. International Fiscal Risk Management Mechanisms: Comparative Case Studies

#### 4.1. Georgia: Radical Liberalisation and Fiscal Resilience

Georgia acceded to the WTO in 2000 and subsequently pursued one of the most ambitious trade liberalisation programmes among transition economies during the 2004–2008 period. According to World Bank data, the simple average MFN tariff rate fell from 10.8 per cent in 2002 to 1.15 per cent by 2008 (World Bank WDI, 2023). Notwithstanding the scale of this adjustment, the process did not precipitate a fiscal crisis; on the contrary, budget revenues as a share of GDP increased over the same period.

The principal sources of Georgia’s fiscal resilience were as follows (Transparency International Georgia, 2010; IMF, 2009): first, the simultaneous implementation of VAT reform and the digitalisation of tax administration sharply increased the efficiency of domestic tax collection; second, a comprehensive anti-corruption programme produced a marked increase in budget receipts; and third, the introduction of a flat 20 per cent personal income tax rate, combined with a reduction in the number of tax types, broadened the formal tax base. It is noteworthy that Georgia’s corporate income tax reform was implemented later — in 2017 — on the basis of the Estonian model, under which tax is levied only on distributed profits rather than on total corporate income (World Bank, 2018).

#### **4.2. Chile: The Stabilisation Fund Model**

Chile established the Economic and Social Stabilisation Fund (Fondo de Estabilización Económica y Social — FEES) in 2007 to manage the fiscal volatility generated by copper export revenue fluctuations (Marcel, 2013). The FEES model has since been widely recognised as a benchmark for the management of cyclical fiscal risk in open, commodity-dependent economies (IMF, 2009; IFSWF, 2023).

The Fund’s operational mechanism operates as follows: when the copper price exceeds its long-run structural trend, a portion of the surplus revenue is transferred to the FEES rather than appropriated for current expenditure; when prices fall below trend, Fund resources are deployed to cover the resulting budget shortfall. According to IMF (2009) data, during the 2008–2009 global financial crisis Chile drew on FEES resources to finance a fiscal stimulus package equivalent to 2.9 per cent of GDP. According to IFSWF (2023), this contributed to Chile’s markedly stronger economic performance relative to Mexico: whilst the Mexican economy contracted by 4.7 per cent in 2009, Chile’s GDP declined by only 1 per cent.

#### **4.3. Malaysia: Structural Risk Management**

Malaysia launched its Economic Transformation Programme (ETP) on 25 October 2010 in response to structural competitiveness challenges, including those associated with trade liberalisation (PEMANDU, 2010). The Programme’s primary objective was to transform Malaysia into a high-income economy by 2020, through the development of 12 National Key Economic Areas (NKEAs).

ETP outcomes: GDP growth reached 7.2 per cent in 2010, followed by 5.1 per cent in 2011 and 5.6 per cent in 2012 (Dawn, 2013; World Bank WDI, 2023). Over the period 2010–2019, Malaysia increased gross national income per capita from US\$6,700 to approximately US\$11,000. However, full high-income status had not been achieved by 2019, partly owing to global trade uncertainties (World Bank, 2022).

#### **4.4. Kazakhstan: The Manifestation of Compounding Fiscal Risks**

Kazakhstan acceded to the WTO in 2015 and assumed the associated tariff reduction commitments. The timing, however, coincided with a sharp decline in global oil prices and a significant depreciation of the Kazakhstani tenge. According to World Bank (2016) data, GDP

growth slowed from 4.1 per cent in 2014 to 1.2 per cent in 2015. The state budget deficit was contained within 3 per cent of GDP in 2015, achieved through drawdowns from the National Oil Fund (World Bank, 2015).

Kazakhstan’s experience illustrates a critical property of trade-related fiscal risks: their capacity for mutual amplification, producing what may be termed a “cascading effect.” As tariff revenues contracted, hydrocarbon export receipts fell simultaneously, and the resulting economic slowdown caused VAT collections to decline as well. This compounding dynamic underscores the necessity of evaluating fiscal risks in an integrated, systemic manner rather than in categorical isolation (OECD, 2018).

**Table 2. Comparative Analysis of Fiscal Risk Management across Case Study Countries**

Country	Principal Risk	Mechanism Deployed	Outcome	Lesson for Uzbekistan
Georgia	Revenue risk	VAT reform + tax digitalisation	Successful	Modernise tax administration
Chile	Cyclical risk	FEES stabilisation fund (est. 2007)	Successful	Establish budget reserve fund
Malaysia	Structural risk	Economic transformation programme (ETP, 2010)	Largely successful	Develop export transformation strategy
Kazakhstan	Multiple simultaneous risks	National Oil Fund (partial)	Partially effective	Proactive integrated risk assessment essential

Source: Author’s compilation based on World Bank (2015, 2016, 2022), IMF (2009, 2016), Marcel (2013), and PEMANDU (2010).

## 5. Uzbekistan: Fiscal Risk Assessment and Policy Recommendations

### 5.1. Uzbekistan’s Fiscal Vulnerability Profile

Uzbekistan’s current fiscal structure presents the following risk exposure profile in the context of impending WTO accession commitments (World Bank, 2022; IMF, 2022; Ministry of Finance of Uzbekistan, 2023):

**Table 3. Uzbekistan’s Fiscal Vulnerability Profile (2023)**

Indicator	Current Value	Transition Economy Average	Risk Assessment
Tax revenues / GDP (WB, 2023)	11.5%	15–18%	⚠ Below average
Budget deficit / GDP (IMF, 2023)	–4.1%	–3.2%	⚠ Moderate

Indicator	Current Value	Transition Economy Average	Risk Assessment
Public debt / GDP (WB, 2023)	36.8%	52.4%	✓ Relatively low
Tax administration quality (WB)	65/100	72/100	⚠ Moderate
Budget reserve / stabilisation fund / GDP	≤2%	5–8%	✗ Very low

Source: World Bank WDI (2023), IMF Regional Economic Outlook (2022), Ministry of Finance of Uzbekistan reports.

The profile reveals that Uzbekistan’s most critical fiscal vulnerability is the inadequacy of its budget reserve and stabilisation fund, which stands at less than 2 per cent of GDP — well below the 5–8 per cent range observed among comparable transition economies. Total tax revenues at 11.5 per cent of GDP are also substantially below the 15–18 per cent benchmark considered appropriate for economies at Uzbekistan’s level of development. The country’s relatively low public debt ratio of 36.8 per cent of GDP represents a compensating strength, preserving a degree of fiscal space for countercyclical adjustment when required (IMF, 2022).

## 5.2. Policy Recommendations

On the basis of the comparative case study analysis and the fiscal vulnerability profile presented above, four priority policy recommendations are advanced:

### Recommendation 1: Establish a Trade Stabilisation Fund

Modelled on Chile’s FEES (Marcel, 2013), Uzbekistan should establish a dedicated Trade Stabilisation Fund. The Fund could be capitalised from three sources: (a) 30 per cent of annual budget surpluses in years of above-trend revenue performance; (b) a portion of privatisation receipts from the ongoing state enterprise reform programme; and (c) technical assistance allocations from international financial institutions. The target capitalisation should reach 5 per cent of GDP by 2030 — a level sufficient to provide 12 to 24 months of compensatory budget support in the event of a material trade shock.

### Recommendation 2: Institutionalise Fiscal Stress Testing

Drawing on IMF (2016) best practice guidance, a Fiscal Risk Management Unit should be established within the Ministry of Finance, tasked with conducting annual stress tests across three standardised scenarios: (a) a baseline scenario projecting current trends forward; (b) an adverse scenario assuming a 20 per cent decline in key export commodity prices; and (c) a crisis scenario modelling a 15 per cent contraction in global trade volumes. Publishing stress test results alongside the annual budget submission would provide the legislative and public basis for informed fiscal policy debate, and would enable Uzbekistan’s WTO negotiators to define defensible fiscal resilience thresholds.

### Recommendation 3: Synchronise Tariff Liberalisation with Domestic Tax Reform

Drawing on Georgia's experience (World Bank, 2018), each stage of tariff reduction should be calibrated to a corresponding package of domestic tax administration reforms. A proposed sequencing would be: 2025–2027 — full deployment of electronic VAT invoicing and real-time tax monitoring across all enterprise categories; 2027–2029 — corporate income tax base broadening, strengthened transfer pricing enforcement, and alignment of free economic zone incentive regimes with WTO Subsidies and Countervailing Measures (SCM) Agreement disciplines; 2029–2032 — revenue diversification through enhanced property and environmental tax instruments. This calibrated approach ensures that compensatory domestic revenues are expanding in advance of, rather than in response to, the contraction in tariff receipts.

#### **Recommendation 4: Develop an Export Transformation Strategy**

Analogous to Malaysia's ETP (PEMANDU, 2010), Uzbekistan should develop a structured export transformation strategy with three priority axes: (a) promotion of higher value-added exports in textiles, chemicals, and pharmaceuticals; (b) expansion of digital services and information technology exports; and (c) investment in agro-processing capacity to increase the value-added content of agricultural commodity exports. These structural measures would progressively reduce export concentration, enhance the resilience of the domestic revenue base, and reduce Uzbekistan's long-term exposure to commodity price cyclicity (ADB, 2023).

#### **6. Conclusion**

This thesis has examined the four principal categories of fiscal risk generated by trade liberalisation — revenue, structural, cyclical, and institutional — and has evaluated the international mechanisms through which these risks are managed, drawing on the comparative experience of Georgia, Chile, Malaysia, and Kazakhstan. The principal findings are as follows:

- The fiscal risks of trade liberalisation exhibit a capacity for mutual amplification that requires integrated, systemic assessment and management rather than evaluation in categorical isolation (Hemming et al., 2003; IMF, 2016).
- The experience of successful countries — Georgia, Chile, and Malaysia — demonstrates that the three principal fiscal risk management mechanisms — domestic tax reform, stabilisation funds, and economic diversification — deliver the greatest benefit when deployed in a coordinated and mutually reinforcing manner.
- Uzbekistan's most urgent fiscal vulnerabilities — the inadequacy of its budget reserve fund and the relatively low tax-to-GDP ratio of 11.5 per cent — should be addressed prior to the conclusion of WTO accession negotiations, as a matter of strategic fiscal preparedness (IMF, 2022; World Bank, 2022).
- The four recommendations advanced — a stabilisation fund, institutionalised stress testing, sequenced domestic tax reform, and an export transformation strategy — constitute a coherent and mutually reinforcing fiscal risk management framework tailored to Uzbekistan's specific vulnerabilities and institutional context.

Trade liberalisation need not represent an inescapable fiscal hazard. For countries that approach the process with adequate fiscal buffers, robust domestic tax institutions, and a diversified economic base, WTO accession can serve as a catalyst for a more efficient, resilient, and sustainable revenue system — outcomes that are well within Uzbekistan's reach, provided the necessary institutional and fiscal groundwork is laid with appropriate deliberation and sequencing (Baunsgaard & Keen, 2010; Frankel et al., 2013).

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