Punjab Debt Sustainability Analysis

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Abstract

Punjab is Pakistan’s most populous and economically vibrant province. Its fiscal health, therefore, is crucial to the fiscal stability and economic development of Pakistan as a whole. By end-June 2011, Punjab’s outstanding debt stood at Rs. 413 billion, or 4.0% of Gross Subnational Domestic Product (GSDP). The low debt level is perhaps not surprising given the historical barriers to borrowing imposed at the federal level. But this has changed profoundly with enactment of the 18th Constitutional Amendment which has allowed provinces to borrow domestically and externally, subject to limits imposed by National Economic Council (NEC). This change has heightened the need to examine what Punjab owes and the question of provincial debt sustainability in general.

As there is no threshold defined for subnational debt levels, this sustainability analysis considers unsustainable fiscal policies and borrowing strategy to be those that lead to an explosive accumulation of debt such that it would jeopardize the normal provision of services by the province. The analysis projects the debt outlook through the fiscal years 2012 to 2021, using the Government of Punjab’s current Medium-Term Fiscal Framework (MTFF) as the base. The MTFF for fiscal 2012 anticipates fiscal surpluses in medium term, driven mainly by an improvement in provincial finances due to a favorable Seventh National Finance Commission Award, and thus concludes that the debt outlook is sustainable through fiscal 2021: the debt-to-GSDP ratio gradually declines over the next 10 years, to 1.2%, from 4.0%; the interest payments-to-revenues ratio decreases to 0.9%, from 3.0%; while the debt service-to-revenues ratio rises by a modest 0.3% to 3.3%. The analysis then explores some potential vulnerability to economic and fiscal shocks. We find Punjab debt sustainability to be fairly robust to most shocks, except when the individual shocks are combined. However, the probability of combined shock remains very low.

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Recent Fiscal Developments in Punjab

Punjab’s Development Challenges

1. With a population of about 95 million—well over half of the national total—and accounting for nearly 60% of the economy (Figure 1), Punjab is a major determinant of Pakistan’s economic growth and poverty reduction. The country’s solid economic and social performance during the early 2000s was largely due to the robust economic growth and decline in poverty in Punjab. Social indicators in the province, as in the rest of Pakistan, have exhibited noticeable improvements in recent years but still lag behind comparable countries.

![Figure 1](image)

*Source: Punjab MTFF, FY 2012-15*

2. The provincial economy grew rapidly in the first half of the 2000s, by an estimated 7.7% per annum¹ in real terms between fiscal years 2001 and 2007, compared with 5.6% for Pakistan as a whole. Punjab’s economic growth has slowed considerably in the last few years, however, reflecting a loss of growth nationally.² One of the major factors in the weakening of Punjab’s economy has been a slowdown in the industrial sector due to power shortages.³ Agricultural growth has also declined; the province suffers from a decline in the availability of water in the irrigation system.⁴ One reason why Punjab has not realized its promising potential is its persistently high infrastructure gap. There is an urgent need to boost infrastructure financing in order to remove constraints to growth⁵ and meet growing needs and expectations of its population.

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¹ Source: Punjab Medium-Term Fiscal Framework (MTFF), fiscal 2012.
² National economic growth averaged 3.7% in second-half of the 2000s compared to 6.0% in the first half. Over the last five years, the economy has encountered a series of challenges, notably the 2007 commodity market shock, and political instability and adverse security conditions which prevented economic managers from implementing adequate stabilization measures. Economic growth has also sharply declined through insufficient investment in energy, and poor governance. The fiscal situation remains vulnerable as poor tax collection and high power subsidies undermine efforts to lower deficit. A weak policy environment and worsening international relations have caused a decline in external financing. In addition, a series of natural disasters have stifled hopes of an early economic recovery.
³ Punjab MTFF, fiscal 2012.
⁴ Punjab MTFF, fiscal 2012.
⁵ The Punjab MTFF, fiscal 2012, estimates that infrastructural investments totaling about 3.0% of GSDP would be required to remove the constraints to provincial growth. But these investments (federal and provincial) amounted to only about 1.2% of GSDP (nearly 1.9% short of the total required) in fiscal 2011. For the fiscal period 2012-15, additional investments of 2.2%, 1.8%, 1.7% and 1.6% of GSDP would be required each year to bridge the shortfall and regain the growth momentum of the province.
Fiscal Developments

3. **Revenues**—The Punjab government’s total resource envelope over the last ten years has increased by 87% in real terms, from Rs. 98 billion in fiscal 2002 to Rs. 183 billion in fiscal 2011. As with other provinces, however, Punjab is heavily dependent on resources from the central government to fund expenditures (Figure 2). Federal transfers (including grants) have increased by 89%, from Rs. 78 billion in fiscal 2002 to Rs. 147 billion in fiscal 2011. Total provincial own revenues in fiscal 2011 constituted 19.6% of its total receipts, compared to 20.4% in fiscal 2002. Among these, GST on services became a significant source of revenue for the province last year following provincialization of sales tax—amounting to Rs. 34 billion (almost 32% of total own revenues) compared to Rs. 1 billion in fiscal 2002. This large vertical imbalance in finances has brought about a major disconnect between revenue-raising responsibilities and expenditure decision-making, undermining accountability in the process.

![Figure 2 Trends in Punjab Revenue in Real Terms: FY 2002-11](image)

Source: Punjab Fiscal Accounts, various years

4. As mentioned, the share of provincially collected taxes has declined relative to total provincial receipts. In fiscal 2011 provincially collected taxes stood at 5.6% of total provincial revenues—36% lower than at the start of decade—and were narrowly determined throughout. Three categories—property transfers, stamp duties and motor vehicles taxes—constituted nearly three-fourth of provincially collected taxes (Figure 3). Of these, the share of motor vehicle taxes and land revenues has grown while that of stamp duties has declined. Furthermore, the share of provincially collected non-tax receipts has fallen by 27%. It was

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6 The phrase ‘real terms’ in this document relates to price values in fiscal 2000.
7 Includes own-tax and non-tax revenues inclusive of GST on services.
8 The 18th Constitutional Amendment (see Annexure A for details) has expanded the tax domain of provinces to include sales tax on services and accepted the demand of provinces to devolve services taxed under the ambit of federal excise duties to the provinces. There is also a provision for GST on services to be collected by the provinces, if they so desire.
9 This is different from own revenues in the sense that it excludes GST on services. GST on services is a provincial tax that is collected by federal government on behalf of provinces and the federal government charges a service fee for this collection.
10 This consists of interest income, profits and dividends, proceeds from privatization or liquidation of government assets, royalties and development surcharges on oil and gas as well as proceeds from community, social and economic services.
7.7% in fiscal 2011, compared to 10.6% in fiscal 2002, because of reduced proceeds from civil administration, diminished royalties on natural gas and oil, and stagnant proceeds from user charges on economic and social services.

5. The Seventh National Finance Commission (NFC) Award (effective July 1, 2010) and the ratification by parliament of the 18th Amendment to the Constitution (April 2010), increased provincial access to national revenues, due to enhancement of the divisible pool. However, the horizontal share of Punjab (from the divisible pool transfers) declined because factors other than population shares were brought into the sharing formula (Box 1). Nevertheless, the increase in overall size of the pie available to provinces more than compensated Punjab for this decline. The fiscal arrangement in the 18th Constitutional Amendment gives the province exclusive access to a new viable and dynamic tax base, namely GST on services. The first year of the Seventh NFC Award, fiscal 2011, saw its own tax receipts rise by 65% in real terms over those of the previous year, largely due to GST on services, a sales tax that is expected to yield substantial revenues for the province in the years ahead. Nevertheless, there is an urgent need to tap other existing provincially collected resources—for instance, urban immovable property, motor vehicles and agriculture—where significant potential exists. Only then could the Punjab government expect to overcome (at least in part) the short-falls, volatility and seasonal fluctuations in federal revenue transfers, which trigger similar patterns at the provincial level.

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11 According to Punjab’s MTFF fiscal 2012, divisible pool transfers to Punjab during the first year of 2009 NFC Award increased by 23%.
12 In addition, the federal government has been asked to surrender taxes on immovable property tax, estate and inheritance taxes, VAT on services and Zakat and Usher. See Anwar Shah (forthcoming).
13 GST on services can potentially yield 0.5%-1.0% of GDP (IPP Fourth Annual Report 2011 estimates this at 0.5% of GDP in 2010-11). In 2010-11, only Rs. 2 billion was collected through agriculture income tax from entire Pakistan (half of which came from Punjab). Revenue from this tax can potentially increase to Rs. 10-15 billion (Aisha Pasha, forthcoming). Urban immovable property tax yielded Rs. 3.2 billion for Punjab in 2010-11. Revenue from this source can be increased by 150%-200% in short-run by adopting certain measures including updating of valuation tables, notification of new rating areas, etc. (Aisha Pasha, forthcoming).
Most of the revenues in Pakistan are collected at the center and redistributed vertically between the federal and provincial governments and horizontally between provinces, based on an elaborate revenue sharing arrangement, i.e. the NFC award (Figure 4). This allocation is the principal source of revenue for the provinces and has increased substantially due to a steady expansion of the divisible pool of taxes (Table 1). The single most important addition in the divisible pool of taxes was the inclusion of sales taxes in the 1974 NFC award (following the 1973 Constitution) which brought sales taxation within the domain of central government for the purposes of administrative efficiency. The 1990 NFC award gave provinces access to 80% of divisible pool of taxes, and expanded their access to resource pool by including excise duty on sugar and tobacco\(^{14}\) (Table 1).

As a result, federal transfers to smaller provinces financed 99% of provincial operating expenditure (Anwar Shah, forthcoming). The 1996 NFC award, on the other hand, was unfavorable to provinces. Even though it gave them a share in customs and federal excise duties (which were under the federal domain) for the first time, this was not enough to compensate for the drastic reduction (from 80% to 37.5%) in their share of the more buoyant taxes on income and sales (Table 1). Furthermore, the revenue potential of custom duties and sales tax was significantly reduced by trade reforms (in the period immediately following the NFC award) and lowering of the sales tax rate. The last two awards, in 2006 and 2009, constituted real efforts to arrest previous centralization tendencies, and decentralized in favor of provinces. The 2006 award boosted the provincial share in the divisible pool of taxes to 45%-50% for the term of the award. Other important changes included (i) ear-marking one-sixth of sales tax revenues for district governments, and (ii) increasing the straight transfer of royalties. The Seventh NFC Award (2009) made some radical changes to the revenue sharing formula. For the first time the horizontal distribution of taxes between provinces is based on criteria other than just population. The criteria now include population (62% weight), poverty (10.3% weight), provincial tax effort (5% weight), and the inverse of population density (2.7% weight). The share of provinces in the divisible pool of federally collected taxes has been increased to 56% in fiscal 2011 and to 57.5% in subsequent years of the award. However, all federal grants and subventions to the provinces, including transfer of one-sixth of GST on goods as octroi and zilla tax replacement grant, have been discontinued. The size of divisible pool has been somewhat expanded by reducing the collection charges retained by the federal government from an average of 5.2% to only 1%. The 2009 NFC award was a major step towards building provincial harmony and furthering the process of decentralization. Overall, under the Seventh NFC Award transfers to provinces have increased by 52% as compared to the last transfers made under the Sixth Award.

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\(^{14}\) Ahmed et al. (2007) noted that the 1990 award significantly increased the volume of provincial shares in the revenue collected by the federal government, by about 18% as compared to the 1974 award.

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**Box 1**  
**A Short History of Federal Transfers (1990-2011)**

Most of the revenues in Pakistan are collected at the center and redistributed vertically between the federal and provincial governments and horizontally between provinces, based on an elaborate revenue sharing arrangement, i.e. the NFC award (Figure 4). This allocation is the principal source of revenue for the provinces and has increased substantially due to a steady expansion of the divisible pool of taxes (Table 1). The single most important addition in the divisible pool of taxes was the inclusion of sales taxes in the 1974 NFC award (following the 1973 Constitution) which brought sales taxation within the domain of central government for the purposes of administrative efficiency. The 1990 NFC award gave provinces access to 80% of divisible pool of taxes, and expanded their access to resource pool by including excise duty on sugar and tobacco\(^{14}\) (Table 1).

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6. **Expenditures**—Recurrent expenditures, on average, have constituted three-fourths of Punjab’s total expenditure over the last ten years. These have increased by 52% in real terms from Rs. 87 billion in fiscal 2002 to Rs. 132 billion in fiscal 2011. There is a high share of ‘fixed’ costs in current expenditures which includes salaries, pensions, interest payments and subsidies. In fiscal 2011, these together constituted almost 40% of provincial recurrent spending (Figure 5). For instance, the wage bill\(^\text{15}\) has increased in real terms by 113% over the last decade, pre-empting 26% of total current expenditure in fiscal 2011 compared to 18% in fiscal 2002. This increase is due to frequent upward revisions of salaries\(^\text{16}\) and expansion of the provincial workforce. Pensions, which constituted 9.4% of recurrent expenditure in fiscal 2011, grew by 26% in real terms over the same period, and provincial subsidies by 45% in real terms, mostly in fiscal 2011.\(^\text{17}\) Only interest payments declined in the period by 58% in real terms due to a declining share of domestic debt in the provincial debt stock. Provincial development spending, meanwhile, rose by a mammoth 280% in real terms, nearly doubling its share of total spending, to 19.6% by fiscal 2011. Through inelastic, large recurrent spending and by inflating its development expenditure, the province has foregone the requisite fiscal space necessary to meet its minimum investment needs.

\[\text{Figure 5} \quad \text{Punjab Share of Major Current Expenditures: FY 2002-11}\]

\[\begin{array}{cccccc}
\text{Year} & \text{Interest} & \text{Wages} & \text{Pension} & \text{Subsidies} & \text{Grants & Investments} & \text{Others} \\
2001/02 & \text{2007/08} & \text{2009/10} \\
\hline
\end{array}\]

\[\text{Source: Punjab Fiscal Accounts, various years}\]

\(^{15}\) For provincial government employees

\(^{16}\) The Punjab government’s salary and pension bill rose steeply in fiscal 2011 when the federal government raised the pay of civil servants by 50%. In addition, medical allowances of employees were increased to 15% of basic pay. These steps added Rs. 54.2 billion to Punjab’s recurrent spending account (Punjab MTFP, fiscal 2012).

\(^{17}\) Prudent wheat pricing brought down the wheat subsidy to only Rs. 179 million by fiscal 2008. Since then, however, the share of subsidies in provincial expenditure has risen sharply with the government’s opting to increase the procurement price of wheat and enhancing procurement targets. By fiscal 2011, the wheat subsidy bill had reached Rs. 12 billion and the 2012 budget envisages one of Rs. 25 billion. The Punjab government has also funded a number of ‘welfare schemes’—the Sasti-Roti (cheap bread) scheme (discontinued in fiscal 2010), the Public Transport Scheme, the Ramzan Package and the Green Tractor Scheme—which have involved significant subsidies.
7. Punjab has never had a fiscal crisis in the conventional sense, i.e. high deficit balance and high debt-to-GSDP ratio (Figure 6). ‘Crisis’ rather has manifested in a whole range of fiscal and structural problems (adverse fiscal trends, worsening structural rigidities and ineffective resource utilization), institutional weaknesses and inadequate public service delivery (both quantitative and qualitative). The resulting social and infrastructural ‘deficits’ have been building over time and are contributing to weaker economic growth, slower poverty reduction and poor social indicators. The province has a tremendous window of opportunity, following enactment of the 18th Constitutional Amendment, to change ‘deficits’ into ‘surpluses’. The 18th Constitutional Amendment has paved way for changing the structure of the country’s government from centralized federal power to centralization at the provincial level. For the first time, delivery of almost all direct services to the people has become the responsibility of the provinces (Annexure A). As this system matures in the coming years, provinces will assume a dominant role in policymaking and service delivery.

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Figure 6  Punjab Fiscal Balance (% of GSDP): FY 2002-11

Source: World Bank Staff Calculations

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18 Anwar Shah (forthcoming).
19 Anwar Shah (forthcoming).
Punjab’s Debt Overview

The Debt Portfolio: A Snapshot

8. Pakistan’s fiscal architecture underwent a fundamental change with the adoption of the 18th Constitutional Amendment. The Constitution had previously allowed provinces to raise domestic and foreign finance, but effectively barred them from doing so by prohibiting provincial borrowing if the province had any outstanding federal debt. As a result, provincial debt levels remained relatively small and manageable.

9. The 18th Constitutional Amendment arguably has overturned that by permitting both internal and external borrowing by provinces, subject to limitations imposed by the National Economic Council (NEC). With the composition of the NEC tilting in favor of provinces, it is likely that they will be allowed to borrow more widely. International practice, however, favors incorporating clear fiscal rules into the Fiscal Responsibility Act, to enable states to borrow while protecting the fiscal primacy of the federation. Brazil provides a case in point. In the 1980s and 90s, the absence of rule-based debt and fiscal guidelines led to three subnational debt crises, and the federal government in Brasilia had to assume massive cumulative debts of the states. This led to passage of a Fiscal Responsibility Law in 2000 that set the rules for state borrowing. Since then there has been no further episode of debt distress. In fact, fiscal performance has improved (Box 2).

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20 Clause (3) of Article 167 of the Constitution, pertaining to ‘borrowing by provincial government’, reads: “A province may not, without the consent of the Federal Government, raise any loan if there is still outstanding any part of a loan made to the Province by the Federal Government; or in respect of which guarantee has been given by the Federal Government; and consent under this clause may be granted subject to such conditions, if any, as the Federal Government may think fit to impose.”

21 Clause (4) of Article 167, of the Constitution (a new clause inserted by the 18th Constitutional Amendment) reads: “A province may raise domestic or international loan, or give guarantees on the security of the Provincial Consolidated Fund within such limits and subject to such conditions as may be specified by the National Economic Council.”
Box 2  Brazilian Fiscal Federalism and the Control of Subnational Fiscal Performance

With 27 state governments and more than 5,500 municipalities, Brazil is a highly decentralized federation. Distribution of tax collection responsibilities is broadly consistent with economic principles that suggest that mobile tax bases should be taxed by the central government and immobile bases by subnational governments. Indirect taxes are shared between the central and subnational levels. As a result of these tax assignments, the central government collects two-thirds of total tax revenues and subnational governments collect the remaining one-third.

Expenditure assignments also stay fairly close to the principles of economic theory on decentralization, with exclusive responsibility assigned for certain expenditures and delivery of public goods and services divided among the three levels of government. Subnational governments account for more than 50% of total government primary expenditures by being the most important providers of education, health and infrastructure services in the country.

To equilibrate revenue and expenditure responsibilities and reduce regional disparities, Brazilian federalism embraces an extensive system of constitutional intergovernmental transfers. As a result, lower levels of government enjoy a relatively high degree of autonomy compared to other federal countries, as their revenues comprise mostly own taxes and constitutional intergovernmental transfers.

The fiscal stance of the states has always been an important element in macroeconomic management in Brazil. Until the late 1990s, the expansionary fiscal policies by the states and the lack of effective controls over their indebtedness resulted in frequent subnational debt crises. On three occasions (1989, 1993 and 1997) the federal government had to assume and reschedule the debts of the states. The largest bailout occurred in 1997, under Law 9496, when the federal government restructured BRL 200 billion (12% of national GDP) of the debts owed by the states.

In the 1997 action, the debts were refinanced for 30 years. This refinanced debt, the so called intra-limite debt, carries a real interest rate of 6%, with the nominal value of the debt rising with inflation. However, the debt service is capped at 13% of states’ net current revenues; anything above that is recapitalized and added to the intra-limite debt stock. At the end of the contracts (in 2028), if there are residual debt balances, the state must pay off the remainder within 10 years.

The 1997 bailout was conditioned upon the states’ compliance with medium-term fiscal adjustment and structural reform programs. Debt renegotiation contracts mandate the implementation of three-year rolling Programs of Fiscal Adjustment (PAFs), to be agreed upon during the period of contract by the National Treasury Secretariat and the 25 States that it had to rescue. The PAFs set annual targets on indebtedness, primary balances, personnel spending, tax revenue and public investment, in order to guarantee a gradual decline in indebtedness. In addition, the PAFs include structural reforms such as privatization or other public sector modernization initiatives.

The controls on subnational fiscal performance were further strengthened by the approval of the Fiscal Responsibility Law (FRL) in 2000. The FRL institutionalized fiscal discipline at all levels of government, incorporating hard budget constraints into a single unifying framework. It explicitly prohibits debt refinancing operations between different levels of government, thereby addressing the moral hazard problem in intergovernmental fiscal relations caused by sequential bailouts. Complementary senate resolutions also prohibit borrowing if: (i) the net consolidated debt exceeds double net current revenue (NCR), (ii) new credit operations exceed 16% of NCR, and (iii) debt service exceeds 11.5% of NCR. Borrowing is also prohibited if it violates debt-reduction schedules set by the contracts under the 1997 bailout law (Law 9496). Finally, emission of subnational government bonds is generally prohibited through year 2016; however, states whose net debt is less than net current revenue have been entitled to issue bonds since 2012, although the federal government still retains the power to veto such bond issue.

This system of controls has resulted in a substantial macroeconomic adjustment—with repeated state and municipal surpluses—that has continued through four federal administrations. In addition, this system has also favored the adoption of appropriate expenditure programs by subnational governments. Besides the controls on indebtedness, FRL requirements improved transparency, strengthened budgetary practices and encouraged the application of the ‘golden rule’ limiting the amount of new loans to the amount of the capital expense. In practice, it means that any loans contracted will only be used for expenses related to investments.

10. Given the historic constraints on borrowing, it is not surprising that Punjab’s debt is small. At end-June 2011, the province’s total debt was Rs. 413.4 billion, or 4.0% of GSDP. This ratio appears even smaller relative to national GDP i.e. 2.4%. Of Punjab’s total debt, 84%, or Rs 346 billion, is foreign, with the Asian Development Bank the principal creditor in fiscal 2011, holding 54% of Punjab’s foreign debt, followed by the World Bank (40%) and the Government of Japan (6%) (Table 2). Foreign debt appears to be contracted on highly concessionary terms and is of long maturity. In fiscal 2011, the average explicit interest rate on foreign debt stood at only 1.0% with average maturity of 17 years (Table 2). Most of the loans have embedded fixed interest rates; only 16 loans in fiscal 2011 were on LIBOR terms. Foreign debt, in terms of currency composition, is heavily denominated in US dollars which accounted for almost two-thirds of foreign debt stock. Moreover, foreign currency risk on (almost all) foreign loans is fully borne by the provincial government.

![Figure 7](image_url)  
**Figure 7** Sectoral Share in Outstanding Punjab Foreign Debt: 30 June 2011

11. In fiscal 2011, program loans (or non-project aid) constituted almost 52% of Punjab’s foreign debt portfolio (or Rs. 180 billion), the remaining 48%, or Rs 166 billion, being project aid. The latter category appears to be focused on the water sector (20% of total), transport and communications (8%), planning and housing (5%), education & training and social welfare (4% each) and agriculture (3%) (Figure 7). Program (non-project) aid, on the other hand, appears to be devoted primarily to three sectors: education, governance and poverty reduction. Punjab’s foreign loan portfolio also contains ten umbrella projects which in fiscal 2011 accounted for about 6.5% of the total foreign debt portfolio.

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22 Provinces in Pakistan in principle face hard budget constraints. Clause 3, Article 167 of the Constitution of Pakistan prohibits provinces from borrowing without the consent of the federal government if there is still outstanding loan to the federal government. Since all foreign borrowing is on-lent by the federal government to the provincial governments, it means that provinces are constantly indebted to the federal government, requiring explicit consent of the federal government to initiate any other form of borrowing.

23 There are no official provincial GDP estimates in Pakistan. Thus, GSDP ratio for fiscal 2011 (and for projection years) is based on Punjab’s Medium-Term Fiscal Framework (MTFF) for fiscal 2012.

24 This ratio is calculated using the nominal GDP of Pakistan in fiscal 2011 at constant factor cost that approximates to Rs. 17,107.5 billion.

25 Management of foreign exchange in Pakistan is a federal function. Thus, the province effectively relies on foreign exchange management by the federal government to mitigate such risks.

26 An umbrella project is project aid benefitting more than one province. It can have multiple executing agencies and beneficiaries.
12. Punjab’s domestic debt accounted for 16% of total debt (or Rs. 68 billion) in fiscal 2011. The domestic debt portfolio of the province is composed mainly of cash development loans (CDLs) with long-term maturities, lent by the federal government to the province to finance irrigation needs. These loans are now being repaid which is drawing down the share of domestic debt in the total debt portfolio. Punjab experienced a one-time debt increase in fiscal 2010 after it was unable to clear an overdraft facility with the State Bank of Pakistan (SBP) the previous year. Consequently, the outstanding amount was converted to a medium-term loan of Rs. 50.9 billion, with mark-up linked to six-month Treasury bill rate.

13. Punjab’s total debt service in fiscal 2011 was Rs. 43 billion (8% of total provincial revenues). Due to highly concessionary nature of foreign debt, almost 70% of the servicing was accounted as domestic debt, even though it constituted only 16% of the total (Figure 8). This is because domestic debt has been contracted on expensive terms. Moreover, the SBP loan has further bloated the debt servicing cost of the total portfolio. Interest payments on total debt have steadily increased from Rs. 10.6 billion in fiscal 2007 to Rs. 17.3 billion in 2011. Nevertheless, interest payments appear to be declining relative to revenues. This declined from 4.4% in fiscal 2007 to 3.2% in fiscal 2011, an improvement due mostly to higher revenue transfers from central government under the Seventh NFC Award (as explained earlier).

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27 In order to facilitate short-term liquidity management, provinces have been provided recourse to financing from the State Bank of Pakistan equivalent to six weeks of wage and salary bill of the province.
**Fiscal Contingent Liabilities**

14. Fiscal contingent liabilities in many countries can substantially change the fiscal results and have a significant impact on public debt and debt sustainability indicators. Because these liabilities are not often accounted for and are not explicit in the fiscal accounts and reporting system, the main impact on provincial finances is known only when the payments are due or the formal commitment is incurred. The first attempt to quantify the most important fiscal contingent liabilities of Punjab was made with the participation of the authorities during the preparation of a debt sustainability analysis, as discussed earlier.

15. Based on information available and interviews with several government staff, including the Bank of Punjab (51% controlled by the provincial government) and the Punjab Pension Fund, a table was compiled (Table 3) that indicates the following main fiscal contingent liabilities and quasi-fiscal activities of the Government of Punjab:

- Capitalization of the Bank of Punjab—the most important item, amounting to about Rs. 28 billion\(^{28}\), in fiscal 2015 and 2017; and
- A 'letter of comfort' issued by the provincial government, and amounting to some Rs. 2.6-3.1 billion each year in the period of projection, will support activities such as taxis, buses and PPPs.

16. Two critical contingent liabilities refer to the Punjab Pension Fund and General Provident Fund (G.P. Fund), recently instituted but not yet fully capitalized. Actuarial estimates for June 2010 indicate an accrued liability of about Rs. 688 billion (about 6.6% of the GSDP) on account of Punjab Pension Fund and Rs. 84 billion (about 0.8% of GSDP) on account of G.P. Fund. These amounts are not included in the fiscal contingent liabilities table because so far and for the medium-term, the budgetary projections already reflect all revenues and liabilities of the pension and G.P. fund. These have been classic pay-as-you-go schemes.

17. In the DSA exercise conducted in this paper, the macro framework and the DSA take account of the differences between inflows and outflows of the pension and G.P. fund. It is recommended that by the time the pension and G.P. fund are reasonably capitalized and begin paying off their liabilities to the employees entitled to the benefits, these should be considered a contingent liability (if the capitalization is not enough) and no longer be budgeted. Because of the relatively small amounts of the current fiscal contingent liabilities identified in the DSA, the fiscal contingent liabilities shown in Table 3 were added to the expenditure projections.

18. Although the applicable information and data were not available at the time this analysis was prepared, Punjab might have other potential ‘implicit’ contingent liabilities, particularly related to public utilities such as water and power supply companies. It is recommended that by the time this analysis is updated, preferably every year, Punjab’s contingent liabilities should be identified and taken into account. If additional ‘implicit’ contingent liabilities are discovered, and there may well be more, future updates of the debt sustainability analysis might consider the realization of ‘implicit’ contingent liabilities by

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\(^{28}\) A letter of comfort amounting to equivalent rupees (granted in two tranches) was issued by the Government of Punjab.
adding a ‘contingent liability shock’ to the analysis, which could be calibrated at 5%-7% of GSDP.

**Table 3  Future Possible Realization of Contingent Liabilities (PKR Billion)**

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<tbody>
<tr>
<td>Capitalization of Bank of Punjab</td>
<td>5.10</td>
<td>8.30</td>
<td>19.90</td>
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| Total capitalization requires equity injection of Rs 10 billion in FY 2010 (of which Government of Punjab picked up 51%). Over the projection period, LoCs for another Rs. 28.3 billion will be issued in two tranches and may realize if the bank is not adequately able to mobilize resources for capitalization.
| Yellow Cab Scheme        | 0.51            | 0.51   | 0.51   | 0.51   | 0.51   |        |        |        |        |        |        |
| The Government of Punjab shall repay irrecoverable loans to the extent of 30% of the maximum principal amount of loans. Total loan amount is Rs. 8.42 billion.
| Bus Rapid Transport System | 0.60            | 0.60   | 0.60   | 0.60   | 0.60   | 0.60   | 0.60   | 0.60   | 0.60   | 0.60   | 0.60   |
| It is expected that 250 buses will be imported (in the next four months). Each bus costs Rs. 8 million. Capital subsidy of 20% on each bus is being paid through budget, and any operational subsidy that reaches Rs. 1 billion per year will be covered by future budgets. These two subsidies are budget items and do not qualify as contingent liabilities. Government of Punjab liability is calculated on the backstopping that is 30% of the total imported cost of buses.
| Liability arising from new initiatives: | 2.00            | 2.00   | 2.00   | 2.00   | 2.00   | 2.00   | 2.00   | 2.00   | 2.00   | 2.00   | 2.00   |
| Fund for PPPs            | 1.00            | 1.00   | 1.00   | 1.00   | 1.00   | 1.00   | 1.00   | 1.00   | 1.00   | 1.00   | 1.00   |
| Infrastructure Development Fund | 1.00            | 1.00   | 1.00   | 1.00   | 1.00   | 1.00   | 1.00   | 1.00   | 1.00   | 1.00   | 1.00   |
| TOTAL                    | 3.11            | 3.11   | 11.41  | 3.11   | 23.01  | 2.60   | 2.60   | 2.60   | 2.60   |        |        |

*Source: Provincial authorities & World Bank estimates*
Debt Sustainability Analysis of Punjab

19. Debt sustainability analysis (DSA) explores a government’s capacity to meet its future financial obligations within the existing macro-fiscal framework of revenues and expenditures and main sources of financing. A government facing a large or rapidly increasing debt would likely need to change its policies in order to remain solvent and incur its usual and anticipated expenditures. Increasing debt can make refinancing of the public debt more costly and in some circumstances even unlikely.

20. DSA thresholds are usually defined by law or through empirical analysis. In several countries, enforced legislation requires that the central and subnational governments comply with pre-defined levels of debt and debt indicators. Using a sample of low- and middle-income countries, empirical studies suggest certain thresholds beyond which a country can experience debt distress.29

21. No specific indicator thresholds for debt sustainability have been defined or empirically identified for provinces in Pakistan, as is the case in many other countries. The analysis in this paper defines an unsustainable fiscal policy and borrowing strategy as one that leads to an explosive accumulation of debt. In other words, given the information set regarding future developments in the macro-framework, an unsustainable fiscal policy is a set of policy actions that would eventually lead the government to become insolvent if there were to be no policy adjustment. However, since the projection period in the current analysis may not cover the full timeframe of the insolvency risk, the paper focuses on the trends of key indicators that imply long-term unsustainability. One such leading indicator that would surely imply debt distress if allowed to persist at high level is the debt-to-GSDP ratio.30 This analysis also employs other critical fiscal indicators, such as interest payments-to-revenues and debt service-to-revenues ratios, to identify further explosive and/or unsustainable trends. To prepare the macro-framework for this DSA, three main blocks of variables were used: (a) total revenues, including own revenues and transfers from the federal government; (b) total expenditures, including current and capital/development; and (c) public debt, both domestic and external (Annexure B provides a visual description of the model, its main variables, and linkages).

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29 World Bank and International Monetary Fund (2009). The debt sustainability framework for low-income countries (LICs) consists of a set of indicative policy-dependent thresholds which provide benchmarks for the baseline scenario projections of external debt burden indicators over next 20 years in order to assess the risk of debt distress. Vulnerability to external and policy shocks is explored in alternative scenarios and standardized stress tests. The indicative threshold for each debt burden indicator is aggregated based on each country’s policy and institutional capacity measured by three-year moving averages of the World Bank’s Country Policy and Institutional Assessment (CPIA) scores.

30 One could be tempted to apply the standard definition of fiscal sustainability, that is, the government’s inter-temporal budget constraint which affirms that the initial debt level should be equal to the present value of future primary surpluses. The literature, however, indicates that this criterion for debt solvency is way too loose. For example, Roubini (2001) reminds us that a country could run very large primary deficits for a very long time if it could credibly commit to run primary surpluses in the long run to satisfy the condition that the discounted value of primary balances is at least equal to the initial public debt. But this is not realistic for three reasons: (a) a government cannot credibly commit to such a path; (b) such adjustment would be highly costly and inefficient, given distortional taxation—that is, if a country had to raise distortional taxes in the long run to sustain primary balances that compensated for short-run primary deficits, the marginal and average tax rate might be very large and distort economic choices (labor, saving behavior) in ways that hurt long-run growth—it does not make sense to have marginal tax rates of 70% in the long run to compensate for low marginal tax rates of 10% in the short run; and (c) if long-run adjustment required to run primary surpluses falls on government spending, rather than taxes, it may again be unfeasible, inefficient and unfair to cut government spending and provision of public services by draconian levels in the long run to allow large spending in the short run.
Baseline Scenario, Macroeconomic and Fiscal Assumptions based on the Punjab MTFF, FY2012

22. The macroeconomic framework is built upon historical data since fiscal 2002. Fiscal 2011 was chosen as the base year for future projections as it is the latest year for which actual data is available. The initial debt stock is reported as Rs. 413.4 billion by the authorities in the base year. The Government of Punjab (GoPj) Medium-Term Fiscal Framework (MTFF) for fiscal 2012 provides projections till fiscal 2015. The projection period is extended to fiscal 2021 by preserving the fiscal 2015 share of underlying variables in GSDP or GDP for the extended projection period. The expected annual inflation rate is specified as 14.0% in the MTFF, and is replicated in the extended projection period. Using these expected inflation rates and the expected real growth rates in the MTFF, the nominal GDP growth rate is projected to average 18.2% in the projection period and 18.6% over the extended period.

23. In the baseline, the dynamics of Punjab’s revenues can be summarized as follows (see also Appendix C, Table C1):

- Own tax revenue grows slightly less than the GSDP over the MTFF projection period, and the extended projection period preserves the own tax revenue to GSDP ratio by assuming that the numerator and denominator grow at the same rate (18.6%, nominally) in fiscal 2016-21;
- Own non-tax revenue share of GSDP, on the other hand, is expected to decrease at a slower pace over 10 years of projection period as interest income, dividends, profits from state-owned enterprises, etc. are projected to decline;
- Federal transfers and grants are assumed to grow at the same rate as the nominal GDP, hence their shares in GDP are also preserved over the six additional years of the projection period;
- Overall, Punjab’s total revenues are expected to increase to 5.28% of GSDP in fiscal 2012, and gradually decrease to 5.09% by fiscal 2021.

Figure 9 Baseline: Revenue, Primary and Overall Balances (% of GSDP)

31 The baseline scenario has been constructed based on discussions with the authorities (March 24-30 in Lahore) and information available up to March 2012.
24. The Punjab DSA adopts expenditure projections of the government’s MTFF document, and preserves the same main ratios relative to GSDP in the extended projection period. Development expenditures are projected to remain at 1.5% of the GSDP throughout the projection period as in the baseline scenario, with the exception of fiscal 2013 and 2014 when it is expected to be 1.6% as in MTFF. Similarly, primary expenditures\(^{32}\) are expected to remain at 5.0% of the GSDP over the projection period (see Annexure C, Table C1).

25. The framework presented in the baseline scenario with respect to the government’s MTFF and extended projection period generates a favorable fiscal position for Punjab. Two main fiscal result measures—primary\(^{33}\) and overall balances—exhibit surpluses and gradually improve throughout the DSA period (Figure 9). These favorable fiscal results are driven mainly by more favorable terms in federal transfers over the MTFF projection period, as analyzed previously. Conservative projections of the expenditures embedded in the government’s MTFF also explain the positive fiscal results during the period of analysis.

26. Overall, projections based on the baseline MTFF present a sustainable debt outlook in the medium term. This is driven mainly by already low levels of initial debt and the continuous fiscal surpluses projected by the MTFF. The issuance of new debt is determined by the gross financing needs in a given year, which in turn is determined by revenues, primary expenditures and debt services projected for that particular year. Thus, favorable results in fiscal balances of Punjab manifest in the medium term debt indicators as well. Three main indicators of DSA show the following results (Figure 10):

- Debt-to-GSDP ratio gradually declines to 1.2% by fiscal 2021 from 4.0% in fiscal 2011.
- Interest payments-to-revenues ratio decreases from 3.0% to 0.9% over the same period except for a slight jump of 0.2 percentage point in fiscal 2014 due to the current debt portfolio profile.
- Debt service-to-revenues ratio, on the other hand, exhibits a modest increase from 3.0% to 3.3% during the DSA projection period.

\(^{32}\) Defined as total expenditures, excluding interest payments.

\(^{33}\) Defined as total revenue minus total expenditures, excluding interest payments.
Sensitivity Analysis

27. It is important to consider the impact of changes in certain assumptions of the baseline on key indicators of fiscal sustainability in the medium term. One way of doing this is submitting the baseline to a sensitivity analysis (stress tests), which helps to determine the robustness of the positive debt outlook to adverse shocks in the economy and/or adjustments in Punjab’s fiscal policies. This paper presents four scenarios with possible impacts on debt dynamics.

28. Scenario 1—Growth in GDP and/or GSDP is less than expected: (i) GSDP is shocked. This shock is approximately equivalent to one standard deviation calculated for the fiscal period 2002-11. Consequently, Punjab’s economic growth rate is 4.3 percentage points lower than the baseline in fiscal 2012 and 2013. (ii) Both national and provincial economies are shocked: This is projected to reduce both GSDP and GDP growth rates by 4.3 percentage points from the baseline in fiscal 2012 and 2013.

29. Scenario 2—The government decides to increase its development expenditures through new borrowing: (i) Development expenditures increase temporarily. In this scenario, the GoPj increases development expenditures by Rs. 100 billion per annum in real terms from fiscal 2013-15 compared to the baseline. It is assumed that this three-year additional spending is incurred to close the investment gap in the energy sector. It is further assumed that this additional development spending will have positive spillover on economic growth whereby the GSDP growth increases by an additional 1 percentage point, starting from fiscal 2016. (ii) Development expenditures increase permanently. In this alternative scenario, the GoPj extends the additional development expenditures (as above) to every year during the projection period starting from fiscal 2013. This represents a steady state where the share of government spending in the economy is substantially higher than its historically low levels. It is assumed that this additional expenditure is incurred to minimize the high ‘infrastructure gaps’ (as mentioned earlier). Resultantly, GSDP growth increases by 1 percentage points between fiscal 2016 and fiscal 2018, and by 2 percentage points from fiscal 2019 onwards.

30. Scenario 3—Public sector salaries increase substantially: The provincial government wage bill increases by 30% nominally in fiscal 2013.34

31. Scenario 4—All of the above expenditures (development and salaries) increase in a combined shock

Discussion of the Scenarios

32. In Scenario 1, with less-than-expected GDP and GSDP growth, while the debt-to-GSDP and the interest payments-to-revenue ratios rise, the DSA indicator results could still be considered sustainable due to low levels reached. However, the upward trajectory of key

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34 Assumption of a 30% increase in nominal wages is not an extreme scenario. In fiscal 2011, for instance, the provincial government increased the pay of civil servants by 50% nominally after the federal government had made such an increase. Moreover, (as previously noted) the wage bill has consumed, on average, 20% of recurrent spending over the last 10 years (fiscal 2002-11). At this rate, the salaries are projected to remain at around 22% of the estimated current expenditures over the next decade, ultimately squeezing the fiscal space Punjab needs for other priority expenditures.
debt indicators—debt-to-GSDP and interest payment-to-revenues ratios—warrants serious consideration by policymakers and prompts remedial policy actions to reverse this trend.35

35 It is important to note that, especially in the context of current global economic slowdown, lower GDP and GSDP scenarios change the long-term prospects for debt sustainability. Given the assumptions in the macro-framework, any nominal GSDP growth rate that is equal to or lower than 13.7%, instead of the average 17.9% (as characterized in the baseline scenario), would generate an increasingly convex—that is, explosive in time—debt-to-GSDP trajectory. This result is also evident in the significant impact of lower growth rates on the interest payments-to-revenues ratio. This growth rate could be used as a ‘red-light’ threshold by policymakers, to be monitored carefully.
33. The main results of the sensitivity analysis show that if there is a growth shock similar to the one described above, the following impacts will occur:

- Lower GDP and GSDP will undermine the overall balance, although the overall balance in the baseline remains positive (Figure 11a);
- The downward trend in debt-to-GSDP ratio is reversed (Figure 11b);
- The interest payments-to-revenues ratio will rise (Figure 11c);
- The debt service-to-revenues ratio will increase from 3.0 percent in fiscal 2011 to 12.5 percent in fiscal 2021.

34. In Scenario 2, with a permanent increase in development expenditures, overall balances begin to slip into deficit and this leads to a permanent deterioration in the debt-to-GSDP ratio, which climbs to 6.8% by fiscal 2021 (Figure 12a). Moreover, the impact on interest payments-to-revenues ratio is also significant, raising it from 2.5% to about 8% by the end of the projection period. Similarly, the debt service-to-revenues ratio rises to 18.8% by fiscal 2021 from 3.0% in fiscal 2011. As expected, the impact of a temporary increase in development expenditures is milder than a permanent increase. In the first scenario, the debt-to-GSDP ratio reaches 3.1% and the interest payments-to-revenues ratio reaches 3.3% and debt service-to-revenues ratio reaches 8.6% in the long term. Although the levels of the main DSA indicators reached in long term are still low, their upward trend is of some concern. Furthermore, it is important to remember that these results are based on the assumption that GDP and GSDP will grow at the rate projected in the baseline scenario. The key indicators of fiscal sustainability under alternative development expenditure scenarios are summarized in Figures 12a and 12b.

35. Scenario 3, an increase in the wage bill by 30% in nominal terms in fiscal 2013, would have slight impact on the main DSA indicators. Figures 13a and 13b summarize the main implications of such a one-time shock: the debt-to-GSDP ratio deteriorates by 0.8% relative to baseline by end of the projection horizon whereas the interest payments-to-revenues ratio
and the debt service-to-revenues ratio deteriorates by 1.0% and 2.2% respectively as compared to the baseline.

36. Finally, Scenario 4, the worst case, combining all of the shocks mentioned above, is accompanied by a 2% real annual depreciation in the domestic currency exchange rate. This depreciation is imposed exogenously.\textsuperscript{36} Although the probability of such a combined shock is low, one could expect a situation in which (a) economic growth of both national and provincial economies is hit simultaneously by a natural catastrophe such as floods; (b) development expenditure increases are diverted to rehabilitation and reconstruction activities; (c) an increase in nominal wages materializes because it was announced prior to the floods and it is politically imperative to carry through the decision; and, (d) the balance of payments position is upset that it requires a significant devaluation of domestic currency to recover external balance. The impact of these shocks combined would be substantial, leading to an unsustainable trajectory. The overall balance-to-GSDP ratio, for example, would fall to -1.7% by fiscal 2021, when all four shocks are realized. Figures 14a and 14b summarizes the main outcomes:

- The debt-to-GSDP ratio rises substantially to 11.4% when the government undertakes a permanent increase in development expenditures along with other shocks.
- The interest payments-to-revenues ratio also increases significantly, to 13.6% by the end of the projection period.
- The debt service-to-revenues ratio is probably the most affected debt sustainability indicator under the combined shock that includes a permanent rise in development spending as the ratio approaches 31.6% by fiscal 2021 from 3.0% in fiscal 2011.

\textsuperscript{36} Given the scope of this debt sustainability analysis and the modeling tools used, it was not feasible to create a fully-structured general equilibrium model in which the exchange rate would react to changes in growth, absorption, and other factors.
Figure 14  Impact of Combined Shock

**Figure 14a: Impact of a Combined Shock on Debt-to-GSDP**

**Figure 14b: Impact of a Combined Shock on Interest Payments-to-Revenues**
Conclusion

37. The GoPj MTFF fiscal 2012 suggests a favorable fiscal position for Punjab in the medium-term baseline scenario. Two main fiscal measures—primary and overall balances—exhibit gradually improving surpluses throughout the DSA period. These fiscal results are driven mainly by more favorable terms in federal transfers and conservative projections of expenditures embedded in Punjab MTFF through the period of analysis. Similarly, decreasing debt-to-GSDP and interest payments-to-revenues ratios, and a modestly increasing debt service-to-GSDP ratio, indicate a sustainable debt outlook through the projection period of this analysis.

38. The debt sustainability exercise uses sensitivity analysis (stress tests) to assess the main impacts when key variables are exposed to exogenous/policy shocks. The analysis shows that: (a) a lower GDP and GSDP growth scenario increases the debt-to-GSDP and interest payments-to-revenue ratios, but DSA results are still sustainable; (b) with a permanent increase in development expenditures, fiscal balances begin to exhibit deficits, weakening the debt-to-GSDP ratio permanently; moreover, the interest payments-to-revenues ratio increases significantly; and (c) a 30% nominal increase in the wage bill in fiscal 2013 would generate only a slight impact on the main sustainability indicators: the debt-to-GSDP and the interest payments-to-revenues ratios deteriorate slightly.

39. A combined shock—a worst-case scenario—has substantial impact, producing a trajectory of fiscal un-sustainability in Punjab. The overall balance-to-GSDP ratio, for instance, falls to -1.7% by fiscal 2021, when all four shocks materialize, in addition to a 2% real depreciation per year in the exchange rate. Similarly, the debt-to-GSDP ratio rises substantially to 11.4%, as does the interest payments-to-revenues ratio, reaching 13.6% by the end of the projection period.

40. The sustainability analysis provides important policy indicators for Punjab. Firstly, the current fiscal macro framework for the medium term, if implemented as expected, indicates that the Government of Punjab still has ample room to increase borrowing in order to finance investment gap. Secondly, the stress tests indicate that a combination of shocks over several years would jar the public finances onto an unsustainable path requiring the government to change policies in order to remain solvent, incurring projected expenditures—although there is low probability of such a shock. The province seems eager to borrow (domestically and externally), contingent upon the National Economic Council agreeing to such borrowing. However, prudent debt management practices need to be put in place, especially if provincial debt is expected to increase. Furthermore, better debt management practices and procedures need to be followed to forestall potential shocks to fiscal framework, as posited in the stress tests.

41. A first step to improve debt management practices would be to carry out a diagnostic exercise to highlight the strengths and weaknesses of existing practices. A subnational Debt Management Performance Assessment (DeMPA) would be a quick and feasible solution.37

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37 Launched in November 2008, the Debt Management Facility (DMF) for Low-Income Countries (LICs) of the World Bank is a grant facility financed through a multi-donor fund to support scaling up and accelerated implementation of Bank’s debt management work program in DMF-eligible countries. The facility has the specific objective of strengthening debt management capacity and institutions.
second step, based on the DeMPA assessment findings, would be to implement a subnational Debt Management Reform Plan. The reform plan, prepared in conjunction with the authorities, would design an actionable matrix of reforms, providing inputs, outputs, outcomes, costing and sequencing of activities. It would identify actions to improve debt management procedures and functions, and institutions related to debt management.

42. Nonetheless, there is a need to improve public investment management in parallel with debt management, since much of the likely additional borrowing would be used for bridging the investment gap. For this purpose, using a standard diagnostic tool—the Public Investment Management (PIM) assessment—similar to the DeMPA, would generate the necessary concurrent improvements in the efficiency of public investment management in Punjab.
Annexure – A

The 18th Constitutional Amendment –Some Important Aspects

43. The 18th Constitutional Amendment made substantial changes to the Constitution of Pakistan. These range from renaming the North West Frontier Province as ‘Khyber Pakhtunkhwa’ to redefining the division of powers between the President and the Prime Minister. One of the more important changes is the elimination of the ‘Concurrent List’ of the Constitution. The list enumerated joint legislative functions of the federal and provincial governments. The changes restored provincial autonomy to levels originally intended in the 1956 and 1973 Constitutions, in so doing removing a persistent aggravation in federal-provincial relations. It has narrowed the opportunity for arbitrary federal intervention in provincial affairs and therefore, may have gone some distance in relieving provincial discontent over federal policies.

44. Intergovernmental balance of powers: Elimination of the Concurrent List effectively gave the provinces and federal territories powers to legislate laws governing arbitration and contracts; explosives and firearms; labor; educational curricula, planning and policy (except for higher education); environmental pollution; bankruptcy; drugs and medicines; infectious diseases; population and social welfare; shipping; and 25 other diverse policies and functions. Prior to this step, functions such as electricity management; major ports; all regulatory authorities established under the federal law; national planning and national economic coordination; supervision and management of public debt; censuses; standards in institutions for higher education and research; and inter-provincial coordination had been transferred to Part II of the Federal Legislative List, making them governable not by any government but by the ‘federation’ through the Council of Common Interest (CCI). The 18th Amendment also specified a threshold (equal to the share specified in the Seventh NFC Award) for the provinces’ share in the divisible pool of federally collected revenue.

45. Fiscal implications and financing arrangements of the 18th Amendment: Despite the large number of functions devolved to provincial governments, the fiscal implication of the 18th Amendment is likely to be small. In fiscal 2011, the federal government allocated Rs. 45 billion in its recurrent budget for the divisions and functions that have now been devolved to the provinces. Of this amount, 52% went to the delivery of devolved services in the federal territories and thus remain with the federal government. Hence, the devolution will potentially shift Rs. 21 billion of recurrent spending from the federal to provincial governments, or just 2.4% of the combined recurrent budget of the four provincial governments. Similarly, the fiscal 2011 allocations for development projects devolved to provinces amounts to Rs. 47 billion, or 16% of the aggregate provincial development budget. This means that total expenditure devolved to provinces—Rs. 68 billion, or 0.4% of GDP—is only 5.7% of the combined budget of the provinces.

46. The fiscal impact on provinces is further reduced by the decision of the provincial governments not to accept the federal employees of the devolved divisions, other than those already working in the provinces. This, however, shifts the cost of employees made redundant by devolution to the federal government. The fiscal impact on provinces is further

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reduced by the CCI’s decision to retain the federal government as financer of the population welfare program, the health sector vertical programs and the Higher Education Commission (HEC) for the remaining three years of the Seventh NFC Award term. This has reduced the fiscal impact on the provinces to about Rs 43 billion (0.25% of GDP, or 3.6% of the combined provincial budget). The provision to allow provinces to adopt or abandon any of the devolved projects is likely to reduce the fiscal impact even further. For example, Punjab government has already decided to abandon 37 of the 114 devolved projects, thus reducing the overall implementation cost (throw-forward) of these projects from the original Rs. 131 billion to Rs. 50 billion.

47. The 18th Amendment also reassigned some taxation powers. The federal government has been asked to relinquish taxes on immovable property, estates and inheritance; GST on services and zakat and usher (religious taxes) and has reassigned collection of these to the provinces. The provinces have also acquired the right to borrow from domestic and international lenders, subject to limits and conditions imposed by National Economic Council (NEC). This has created some concern; as the NEC may not be able discipline such borrowings. Similar steps in other countries have had negative financial impacts.

48. Service delivery implications: The 18th Amendment entrusted the provinces with both policymaking and delivery of most public services, with the exception of defense, foreign affairs and currency. Although most of these, and related, services were already performed by the provinces, some functions devolved to provinces are new. The unwillingness of provinces to accept federal employees is likely to create some capacity gaps in delivery of these services. Nevertheless, the provinces would largely have, or could quickly generate, the capabilities to deliver these services, especially since top-order and middle managers in provinces typically belong to elite federal services anyway. However, since the quality of public services delivered by provinces is very poor and weakened by a host of factors which the 18th Amendment cannot address, and has not, it would be incorrect to expect devolution to automatically bring major improvements in quality of services. Nevertheless, with both policy determination and service delivery responsibilities now concentrated in provinces, there is likely to be greater clarity for citizens to hold the right level of government accountable for dysfunctional service delivery.

49. Anomalies created by the 18th Amendment: The Amendment has created some serious anomalies which could adversely affect service delivery. With provinces now responsible for drug control and registration, food and agriculture safety inspections, control and disposal of hazardous materials and waste, water and air pollution, highway safety, consumer product safety standards, and social safety nets, there is real danger of confusing and contradictory policymaking and standards developing, with high compliance and administration costs and increased rent seeking within the public sector. The Amendment has also failed to clarify the roles of various tiers of government regarding natural disasters, emergencies, and calamities such as floods and earthquakes, which are constant threats. These functions would have been better left to the federal government.
Punjab Debt Sustainability Analysis Model

50. This DSA model has three main sub-models focusing on (i) revenues, (ii) expenditures, and (iii) debt dynamics. Each sub-model describes a set of exogenous factors that are shaped by assumptions in the macro-framework and interrelated variables determined endogenously within the model.

51. The first sub-model breaks down total revenues for a given fiscal year into four major components: own tax revenues, own non-tax revenues, transfers from federal government, and grants from federal government. Own tax revenues and non-tax revenues are variables pegged to GSDP, and assumptions about GSDP’s growth rate and share of revenues determine the growth rates of own tax and own non-tax revenues. Grants and transfers from federal government are pegged to national GDP in a similar fashion.

52. The second submodel covers total public expenditures, and classifies them under development and current expenditures. Development expenditures in a given year are determined by their value in previous fiscal year. Their growth rate is determined by development expenditure scenarios in macro-framework. Modeling current expenditures, on the other hand, requires additional structure in light of the policy scenarios in Punjab, drawing mainly on primary expenditure projections in the macro-framework. These include the expected value of expenditures from the realization of contingent liabilities, as well as interest payments on outstanding and newly-issued debt. (The wage bill, however, is extracted from the basket of expenditure projections to allow for a separate wage bill.
scenario analysis.) The interest payments serve as a link between the three main sub-models of the DSA, mainly because interest payments are determined endogenously by revenue, expenditure and debt variables (Figures B2 and B3).

53. The debt dynamics sub-model distinguishes debt-related variables by date of issuance. Debt service projections for the outstanding debt in the beginning of the projection period are imposed exogenously according to official documents. The only uncertainty regarding debt services is the future realizations of exchange rates. The debt stock and service indicators due on newly issued debt are, however, endogenously determined in each year of the projection period. Total revenues and expenditures determine the gross financing needs of debt stock in a given year, which in turn shapes the following year’s interest payments and principal repayments through new borrowings. However, the model requires certain assumptions regarding the maturity of newly issued debt as well as interest rates. The macro-framework provides these assumptions in light of projections for nominal variables such as inflation. Finally, a further assumption is required to determine the share of domestic and foreign currency denominations in new borrowings.
Figure B3  Debt Sub-Model

DOD at end-2010/11
- Initial FX Debt
- Initial Domestic debt

DOD at end-2010/11 + New debt
- Exchange Rate
- Debt
- Principal payments
- Interest payments
- Debt service

New debt
- Gross financing needs
- Domestic debt gross issuance
  - Domestic debt maturity
  - FX share of GFN
  - FX debt maturity
- FX gross issuance
- FX debt

Principal Payments on FX DOD
- Interest payments on FX DOD
- Principal payments on DOD
- Interest payments on DOD

Debt Sub-Model in detail:
### Annexure C

#### Punjab Macroeconomic Baseline

| Table C1: Punjab Macroeconomic Baseline, Nominal Values, Based on GoPj MTFF (as % of GSP, unless otherwise noted) |
|---|---|---|---|---|---|---|---|---|---|---|
| Base Year (Actual) | GoPj MTFF FY2012 | WB Staff Estimates |
| | FY20 | FY20 | FY20 | FY20 | FY20 | FY20 | FY20 | FY20 | FY20 |
| Total Revenues | 5.10 | 5.28 | 5.23 | 5.20 | 5.14 | 5.13 | 5.12 | 5.11 | 5.10 | 5.09 |
| Own Tax Revenue | 0.62 | 0.70 | 0.68 | 0.67 | 0.66 | 0.66 | 0.66 | 0.66 | 0.66 | 0.66 |
| Own Non-Tax Revenue | 0.30 | 0.29 | 0.27 | 0.26 | 0.24 | 0.23 | 0.22 | 0.20 | 0.19 | 0.18 |
| Federal Transfers (% of GDP) | 2.48 | 2.58 | 2.57 | 2.57 | 2.56 | 2.56 | 2.56 | 2.56 | 2.56 | 2.56 |
| Federal Grants (% of GDP) | 0.06 | 0.02 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 | 0.02 |
| Total Expenditure | 4.65 | 5.12 | 5.09 | 5.12 | 5.06 | 5.08 | 5.09 | 5.07 | 5.06 | 5.06 |
| Current Expenditure | 3.73 | 3.59 | 3.44 | 3.52 | 3.54 | 3.55 | 3.57 | 3.54 | 3.54 | 3.54 |
| o/w Salaries | 0.97 | 0.91 | 0.88 | 0.85 | 0.82 | 0.80 | 0.77 | 0.74 | 0.72 | 0.69 |
| Interest Payments | 0.15 | 0.12 | 0.09 | 0.10 | 0.07 | 0.06 | 0.05 | 0.05 | 0.05 | 0.05 |
| Development Expenditures | 0.91 | 1.53 | 1.64 | 1.60 | 1.52 | 1.52 | 1.52 | 1.52 | 1.52 | 1.52 |
| Primary Expenditures | 4.49 | 5.01 | 5.00 | 5.03 | 4.99 | 5.02 | 5.04 | 5.02 | 5.02 | 5.02 |
| Primary Balance | 0.61 | 0.27 | 0.23 | 0.18 | 0.15 | 0.12 | 0.09 | 0.10 | 0.09 | 0.08 |
| Overall Balance | 0.45 | 0.15 | 0.14 | 0.08 | 0.08 | 0.06 | 0.04 | 0.05 | 0.04 | 0.03 |
| Debt | 3.99 | 3.35 | 2.92 | 2.60 | 2.29 | 2.04 | 1.83 | 1.63 | 1.46 | 1.31 |

Source: Provincial authorities and World Bank calculations
References


