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# Public Debt in Nepal: Utilization and Sustainability

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#### Abstract

This study analyzed the public debt of Nepal. The objectives of the study are to measure the resource gap in government financing, to examine the utilization of public debt and to analyze the debt sustainability in Nepal. The analysis was based on the data from fiscal year 2013/14 to 2022/23 and adopted a descriptive approach. Over the past decade, Nepal has experienced a persistent and widening resource gap, primarily due to government expenditure outpacing revenue growth. This gap has increasingly been financed through both internal and external borrowing, raising concerns about the sustainability of public debt in the long run. The analysis shows a continuous rise in both forms of debt. Economic affairs, particularly sectors such as transportation and agriculture, is consistently receiving the largest share of loan-financed spending, reflecting the country's growth-oriented priorities. Moreover, an assessment of Nepal's external debt sustainability indicators between 2019 and 2022 indicates that the country currently possesses a strong debt-carrying capacity and remains at low risk of external debt distress. However, sustaining this favorable outlook will depend on strengthening export performance and maintaining prudent external borrowing practices.

Keywords: Debt sustainability, Nepal, Public debt, Resource gap, Utilization of public debt

JEL Classifications: H60, H63, H68

# 1. Introduction

A higher level of government expenditure relative to revenue is a common feature in almost all countries, leading to deficit financing. The sources of deficit financing include foreign grant, foreign loan and domestic loan. Thus, public debt serves as an alternative to taxation and foreign grants for financing government expenditure. While taxes are often unpopular among citizens due to their direct

financial burden, grants are typically uncertain and subject to political conditions. In this context, public borrowing offers governments a more flexible and immediate means of meeting fiscal needs without imposing immediate costs on taxpayers or relying on unpredictable grants. Sometimes, governments continue to roll over public debt for many years, either hoping that economic conditions will improve or becoming involved in risky and poorly planned financial decisions that can worsen fiscal challenges over time (Reis, 2022).

Public debt levels have also reached a record high in both advanced economies and emerging market economies (International Monetary Fund [IMF], 2021). It has been rising since the 1980s, and it grew even faster after the global financial crisis of 2008-2009 (Yared, 2019). This increase is largely due to governments adopting expansionary fiscal policies aimed at stimulating growth, which often resulted in higher public spending and persistent budget deficits. Additionally, growing demands for public services and social welfare, especially with aging population, have placed further strain on public finances. The 2008-2009 crisis prompted massive government interventions to stabilize economies, financed largely through borrowing. Weak economic growth in the years following the crisis limited revenue collection while sustaining the need for fiscal support, causing debt levels to escalate.

In recent years, the role of public debt in financing Nepal's fiscal deficit has been steadily increasing. This growing dependence on borrowing is largely driven by a significant decline in foreign grants and the country's narrow tax base, which limits the government's ability to generate sufficient revenue. As a result, public debt has become a critical tool for meeting budgetary shortfalls and sustaining public expenditure, particularly in areas such as energy, transport, agriculture, forestry, waste management and public health service. While this shift helps maintain essential government functions, it also underscores the need for improved debt management and enhanced domestic resource mobilization to ensure long-term fiscal sustainability. In this context, the objectives of this study are: to measure the resource gap in government financing, to examine the utilization of public debt and to analyze the debt sustainability in Nepal.

A significant portion of the existing literature on public debt is devoted to analyzing its impact on key macroeconomic indicators, particularly economic growth, given their central importance to fiscal sustainability. The theoretical literature on the relationship between public debt and economic growth remains inconclusive, highlighting the possibility of positive, negative, non-linear or even no relationship between public debt and economic growth. Wagner's law of increasing state activity and the Keynesian fiscal multiplier effect both support the view that public debt can positively influence

economic growth by enabling higher government spending (Saungweme & Odhiambo, 2019). Debt overhang theory argues that there is negative impact of large public debt on economic growth as its burden distorts a country's economic incentives, as the gains from improved performance are primarily captured by creditor countries rather than benefiting the debtor nation itself (Krugman, 1988). According to Ricardian equivalence hypothesis (REH), any increase in government spending, and the resulting rise in public debt, is fully offset by an equivalent increase in private savings, leaving no effect on the real economy (Saungweme & Odhiambo, 2019). Finally, non-linear or threshold effect theory suggests that public debt is generally believed to support economic growth when maintained at lower levels, but its impact tends to become negative as debt levels rise beyond a certain threshold (Saungweme & Odhiambo, 2019; Reinhart & Rogoff, 2010). Empirically, Owusu-Nantwi and Erickson (2016), Greiner (2011), Abbas and Christensen (2007) identified positive impact of public debt on economic growth while Gomez-Puig and Sosvilla-Rivero (2017), Ahlborn and Schweickert (2016) and Egert (2012) found negative impact. Similarly, Kourtellos et al. (2013) and Panizza and Presbitero (2014) found no impact of public debt on economic growth while Baum et al. (2012), Reinhart and Rogoff (2010) and Cecchetti et al. (2011) found non-linear impact.

#### 2. Methodology

This study measured the resource gap in government financing, examined the utilization of public debt and analyzed the debt sustainability in Nepal. Resource gap was measured in terms of fiscal gap of government of Nepal. To achieve these objectives, the study adopted a descriptive research design. The analysis was based on secondary data covering the last ten fiscal years, from 2013/14 to 2022/23. The data were sourced from the publications of the Nepal Rastra Bank (NRB) and International Monetary Fund (IMF). By analyzing these data, the study revealed not only the magnitude of public debt but also its functional allocation and policy implications in the context of Nepal's fiscal landscape.

#### 3. Result and Discussions

## 3.1 Resource gap in Nepal

Table 1 presents fiscal data of the government of Nepal from 2013/14 to 2022/23, focusing on government expenditure (GE), government revenue (GR), the resulting resource gap and the sources of financing used to fill this gap, i.e. foreign grant (FG), external debt (ED) and internal debt (ID). Over the ten-year period, Nepal's government expenditure increased from Rs 435,052.3 million in 2013/14 to Rs 1,421,326.9 million in 2022/23, while revenue rose from Rs 363,493.4 million to Rs 1,010,651.1 million. This persistent fiscal imbalance led to a resource gap that widened from Rs

71,558.8 million to Rs 410,675.8 million. Such problem of resource gaps in Nepal has persisted for a long time (Bhattarai, 2013).

In the initial years, foreign grant was a major financing source, contributing Rs 42,205.8 million (52.6%) in 2013/14, but this declined to Rs 23,382.2 million (5.8%) by 2022/23. In contrast, internal debt increased significantly from Rs 19,982.9 million (24.9%) to Rs 257,289.6 million (64.2%) over the same period, emerging as the dominant source of deficit financing. External debt also grew, though more moderately, from Rs 19,982.9 million (22.4%) to Rs 119,860.0 million (29.9%) in 2022/23. This rising dependence on borrowing raises concerns over debt sustainability and the potential crowding out of private sector credit, pointing to the need for improved revenue mobilization and more prudent fiscal management.

**Table 1**Budgetary resource gap (Rs Million)

| FY      | GE          | GR          | Resource gap | Sources of filling resource gap |           |           |           |  |
|---------|-------------|-------------|--------------|---------------------------------|-----------|-----------|-----------|--|
|         |             |             |              | FG                              | ED        | ID        | Total     |  |
| 2013/14 | 435,052.3   | 363,493.4   | 71,558.8     | 42,205.8                        | 17,998.8  | 19,982.9  | 80,187.5  |  |
| 2014/15 | 531,340.0   | 411,848.2   | 119,491.7    | 38,174.3                        | 25,531.3  | 42,367.6  | 106,073.2 |  |
| 2015/16 | 601,031.9   | 485,239.0   | 115,792.8    | 39,544.0                        | 34,455.9  | 87,774.5  | 161,774.3 |  |
| 2016/17 | 837,247.1   | 612,597.5   | 224,649.6    | 31,932.3                        | 58,013.0  | 88,337.7  | 178,283.0 |  |
| 2017/18 | 1,087,279.9 | 726,717.6   | 360,562.3    | 39,318.7                        | 92,232.7  | 144,750.9 | 276,302.3 |  |
| 2018/19 | 1,110,457.1 | 839,661.9   | 270,795.2    | 22,898.7                        | 124,372.5 | 96,382.0  | 243,653.2 |  |
| 2019/20 | 1,091,333.1 | 841,312.5   | 250,020.6    | 23,718.8                        | 116,643.9 | 194,642.3 | 335,005.0 |  |
| 2020/21 | 1,196,676.0 | 976,309.4   | 220,366.6    | 36,481.4                        | 172,948.2 | 224,000.0 | 433,429.6 |  |
| 2021/22 | 1,310,000.8 | 1,113,848.5 | 196,152.3    | 27,488.1                        | 130,693.6 | 232,635.5 | 390,817.2 |  |
| 2022/23 | 1,421,326.9 | 1,010,651.1 | 410,675.8    | 23,382.2                        | 119,860.0 | 257,289.6 | 400,531.8 |  |

Source: Nepal Rastra Bank (n.d.).

# 3.2 Trend and composition of outstanding public debt in Nepal

The analysis of Nepal's public debt over the ten fiscal years from 2013/14 to 2022/23 reveals a significant and sustained increase in both internal and external debt, except for a temporary decline in 2014/15 as shown in table 2. Internal debt (ID) decreased from Rs 201,817.5 million in 2013/14 to Rs 196,785.8 million in 2014/15, while external debt (ED) declined from Rs 346,819.1 million to Rs 343,261.8 million over the same period. However, from 2015/16 onward, both debt components rose steadily. By 2022/23, internal debt had reached Rs 1,129,103.7 million, and external debt had increased to Rs 1,170,248.8 million, bringing total public debt to Rs 2,299,352.5 million. The most notable surge occurred around 2019/20, when internal and external debt grew by 35.4% and 37.8% respectively, largely due to the government's fiscal response to the COVID-19 pandemic. The data also reflect an

increasing reliance on internal borrowing in recent years, suggesting a potential decline in the availability of external financing for Nepal. In the table 2, TD stands for total debt.

Outstanding debt of government of Nepal (Rs Million)

| FY      | ID          | ED          | TD          | Share of (%) |      | Annual growth rate |      |      |
|---------|-------------|-------------|-------------|--------------|------|--------------------|------|------|
|         |             |             |             | ID           | ED   | ID                 | ED   | TD   |
| 2013/14 | 201,817.5   | 346,819.1   | 548,636.6   | 36.8         | 63.2 | -2.5               | 4.0  | 1.5  |
| 2014/15 | 196,785.8   | 343,261.8   | 540,047.6   | 36.4         | 63.6 | -2.5               | -1.0 | -1.6 |
| 2015/16 | 234,158.0   | 388,762.8   | 622,920.8   | 37.6         | 62.4 | 19.0               | 13.3 | 15.3 |
| 2016/17 | 283,710.7   | 413,978.8   | 697,689.5   | 40.7         | 59.3 | 21.2               | 6.5  | 12.0 |
| 2017/18 | 390,898.7   | 526,154.1   | 917,052.8   | 42.6         | 57.4 | 37.8               | 27.1 | 31.4 |
| 2018/19 | 452,967.7   | 594,926.2   | 1,047,893.9 | 43.2         | 56.8 | 15.9               | 13.1 | 14.3 |
| 2019/20 | 613,212.0   | 819,667.1   | 1,432,879.1 | 42.8         | 57.2 | 35.4               | 37.8 | 36.7 |
| 2020/21 | 800,320.1   | 934,695.2   | 1,735,015.3 | 46.1         | 53.9 | 30.5               | 14.0 | 21.1 |
| 2021/22 | 984,285.2   | 1,025,847.1 | 2,010,132.3 | 49.0         | 51.0 | 23.0               | 9.8  | 15.9 |
| 2022/23 | 1,129,103.7 | 1,170,248.8 | 2,299,352.5 | 49.1         | 50.9 | 14.7               | 14.1 | 14.4 |

Source: Nepal Rastra Bank (n.d.).

# 3.3 Utilization of public debt

Table 3 presents the function-wise utilization of public debt by the government of Nepal from 2013/14 to 2022/23. The data reveals that economic affairs (EA) has consistently dominated loanfinanced spending, reflecting Nepal's priority toward transportation, agriculture and other growthoriented activities. EA's share ranged from a low of 48.8 percent in 2020/21 to a high of 75.8 percent in 2019/20, indicating a strong and sustained focus on economic development. Other sectors such as housing and community amenities (HCA) and environmental protection (EP) received moderate attention. HCA's share generally declined, suggesting a shift in borrowing priorities. EP witnessed a sharp decline after peaking at 22.1 percent in 2015/16, falling to just 1.2 percent by 2022/23, possibly reflecting reduced emphasis or improved funding from other sources. The share of loans directed toward health (H) and education (E) has remained low but relatively steady. Health spending showed some spikes, such as 9.6 percent in 2020/21, likely due to COVID-19-related expenditures. Similarly, share of education remained low across all years, highlighting a limited use of debt for social sector investment. General public services (GPS) saw a substantial share from 2020/21-2022/23 but otherwise remained marginal. Notably, defense (D), public peace and security (PPS), and entertainment, culture and religion (ECR) consistently received negligible allocations from borrowed funds. In summary, the data highlights Nepal's strategic focus on using borrowed resources primarily for economic infrastructure and community development, with limited allocation to social services.

**Table 3** *Function-wise utilization of public debt (%)* 

| FY      | GPS  | D   | PPS | EA   | EP   | HCA  | Н    | ECR | Е   | SS  |
|---------|------|-----|-----|------|------|------|------|-----|-----|-----|
| 2013/14 | 0.3  | 6.3 | 0.0 | 70.3 | 4.0  | 13.2 | 4.0  | 0.0 | 1.7 | 0.2 |
| 2014/15 | 0.9  | 1.5 | 0.0 | 58.8 | 15.8 | 11.8 | 6.6  | 0.0 | 4.4 | 0.2 |
| 2015/16 | 3.8  | 0.0 | 0.0 | 53.0 | 22.1 | 13.4 | 0.0  | 0.0 | 5.4 | 2.3 |
| 2016/17 | 0.1  | 0.0 | 0.0 | 65.2 | 3.6  | 21.5 | 0.0  | 0.0 | 8.3 | 1.1 |
| 2017/18 | 1.0  | 0.0 | 0.0 | 68.3 | 6.4  | 16.4 | 3.4  | 0.0 | 4.5 | 0.0 |
| 2018/19 | 7.5  | 0.0 | 0.0 | 69.1 | 5.1  | 13.0 | 3.8  | 0.0 | 1.5 | 0.0 |
| 2019/20 | 7.0  | 0.0 | 0.0 | 75.8 | 3.5  | 7.5  | 3.3  | 0.0 | 2.9 | 0.0 |
| 2020/21 | 30.2 | 0.1 | 1.3 | 48.8 | 0.7  | 6.5  | 9.6  | 0.0 | 1.3 | 1.4 |
| 2021/22 | 17.4 | 1.0 | 0.0 | 55.9 | 1.4  | 7.2  | 10.7 | 0.0 | 2.3 | 0.0 |
| 2022/23 | 14.8 | 0.5 | 0.1 | 71.5 | 1.2  | 8.1  | 2.9  | 0.0 | 5.0 | 0.0 |

Source: Author's calculation based on MOF (2023, 2024).

#### 3.4 Debt sustainability analysis

An analysis of Nepal's external debt sustainability indicators from 2019 to 2022, evaluated against the IMF-World Bank Debt Sustainability Framework (DSF) thresholds for low income countries as presented in table 4, suggests that Nepal has strong debt-carrying capacity and remains at low risk of external debt distress. The present value (PV) of external debt-GDP ratio (ED/GDP) increased moderately from 12.4% in 2019 to 14.9% in 2022, staying well below the 55% threshold for strongcapacity countries. Similarly, the debt service-exports ratio remained within safe limits, rising from 8% in 2019 to a peak of 15% in 2021 before falling to 11.8% in 2022-well below the 21% threshold. The debt service-government revenue ratio (DS/GR) also remained low, ranging from 2.8% to 3.5% during the period, significantly below the 23% threshold. However, the PV of external debt-exports ratio (ED/X) did breach the 240% threshold in 2021, reaching 254.1%, reflecting the effects of weak export performance amid rising debt levels. While it decreased to 210.7% in 2022, this indicator warrants close monitoring. Overall, the indicators confirm that Nepal's external debt is currently sustainable, with sufficient buffers to absorb potential shocks. Nonetheless, enhancing export capacity and ensuring prudent external borrowing practices will be crucial for maintaining long-term debt sustainability. While the PV of ED/X slightly exceeded the threshold in 2021, the country's low ratios in other indicators support the continued classification of Nepal as facing a low risk of debt distress. Although remittance inflows are not directly included in debt sustainability analysis, the substantial remittance inflows in Nepal play a significant role in maintaining the country's low risk of debt distress.

Table 4

Debt sustainability analysis of Nepal

| FY   | Present Value of | Present Value of |       |  |  |  |  |  |
|------|------------------|------------------|-------|--|--|--|--|--|
|      | ED/GDP           | ED/X             | DS/GR |  |  |  |  |  |
| 2019 | 12.4             | 142.7            | 2.8   |  |  |  |  |  |
| 2020 | 12.5             | 185.6            | 3.1   |  |  |  |  |  |
| 2021 | 13.8             | 254.1            | 3.5   |  |  |  |  |  |
| 2022 | 14.9             | 210.7            | 3.5   |  |  |  |  |  |

Source: IMF (2020, 2022).

#### 4. Conclusion

The fiscal analysis of Nepal over the past decade reveals a persistent and growing resource gap, driven by government expenditures rising more rapidly than revenues. This gap has increasingly been financed through borrowing, reflecting a declining role of foreign grants and posing concerns over long-term debt sustainability. The composition of public debt indicates a rising reliance on internal sources, which may crowd-out private investment. Despite this, debt sustainability assessments show that Nepal remains at low risk of external debt distress, supported by manageable debt indicators and strong remittance inflows. The government has prioritized economic infrastructure in the use of borrowed funds, particularly in sectors like transportation and agriculture, while social sectors such as health and education continue to receive relatively limited attention. Moving forward, Nepal must focus on enhancing domestic revenue mobilization, maintaining fiscal discipline and aligning debt-financed spending with inclusive and sustainable development priorities.

#### References

Abbas, A. S. M., & Christensen, J. E. (2007). The role of domestic debt markets in economic growth: An empirical investigation for low-income countries and emerging markets [Working paper no. 07/127]. IMF. Retrieved from https://www.imf.org/external/pubs/ft/wp/2007/wp07127.pdf

Ahlborn, M., & Schweickert, R. (2016). *Public debt and economic growth-Economic systems matter* [Discussion paper no. 281]. cege. Retrieved from https://link.springer.com/article/10.1007/s10368-017-0396-0

Baum, A., Checherita-Westphal, C., & Rother, P. (2012). *Debt and growth: New evidence for the Euro area* [Working paper no. 1450]. European Central Bank. Retrieved from https://www.ecb.europa.eu/pub/pdf/scpwps/ecbwp1450.pdf

Bhattarai, K. (2013). Public debt in Nepal: An assessment. *Economic Journal of Development Issues*, 15 &16 (1-2), 50-59. https://doi.org/10.3126/ejdi.v15i1-2.11864

- Cecchetti, S., Mohanty, M. S., & Zampolli, F. (2011). *Achieving growth amid fiscal imbalances:The real effects of debt in achieving maximum long-run growth* [Working paper]. Retrieved from https://www.kansascityfed.org/Jackson%20Hole/documents/3073/2011-Cecchetti\_final.pdf
- Egert, B. (2012). *Public debt, economic growth and nonlinear effects: Myth or reality?* [Working paper no. 993]. OECD. Retrieved from http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=ECO/WKP(2012)70&d ocLanguage=En
- Gomez-Puig, M., & Sosvilla-Rivero, S. (2017). *Public debt and economic growth: Further evidence* for the Euro area [Working paper no. 15-06]. University of Barcelona Research Institute of Applied Economics. Retrieved from https://ideas.repec.org/p/aee/wpaper/1506.html
- Greiner, A. (2011). Economic growth, public debt and welfare: Comparing three budgetary rules. *German Economic Review*, 12, 205-222. https://doi.org/10.1111/j.1468-0475.2010.00516.x
- International Monetary Fund. (2020). *Joint World Bank-IMF debt sustainability analysis*. Retrieved from https://documents1.worldbank.org/curated/en/205791586543067463/pdf/Nepal-Joint-World-Bank-IMF-Debt-Sustainability-Analysis.pdf
- International Monetary Fund. (2021). Fiscal Monitor: October 2021. International Monetary Fund.
- International Monetary Fund. (2022). *Joint World Bank-IMF debt sustainability analysis*. Retrieved from https://www.imf.org/en/Publications/DSA
- Kourtellos, A., Stengos, T., & Tan, C. M. (2013). The effect of public debt on growth in multiple regimes. Journal of Macroeconomics, *38*, 35-43. https://doi.org/10.1016/j.jmacro.2013.08.023
- Krugman, P. (1988). Financing vs. forgiving a debt overhang. *Journal of Development Economics*, 29(3), 253-268. https://doi.org/10.1016/0304-3878(88)90044-2
- Nepal Rastra Bank (n.d.). *Outstanding debt of government of Nepal* [Data set]. Retrieved from https://www.nrb.org.np/category/current-macroeconomic-situation/?department=red&fy=2080-81
- Owusu-Nantwi, V., & Erickson, C. (2016). Public debt and economic growth in Ghana. *African Development Review*, 28, 116-126. https://doi.org/10.1111/1467-8268.12174
- Panizza, U., & Presbitero, A.F. (2014). *Public debt and economic growth: Is there a causal effect? Journal of Macroeconomics*, 41, 21-41. https://doi.org/10.1016/j.jmacro.2014.03.009

- Reinhart, C. M., & Rogoff, K. S. (2010). Growth in a time of debt. *American Economic Review*, *100*, 573-578. Retrieved from https://cepr.org/voxeu/columns/debt-and-growth-revisited
- Reis, R. (2022). Debt revenue and the sustainability of public debt. Journal of Economic Perspectives, 36(4), 103-124. https://doi.org/10.1257/jep.36.4.103
- Saungweme, T, & Odhiambo, N. M. (2019). The impact of public debt on economic growth: A review of contemporary literature. The Review of Black Political Economy, 45(4), 1-19. https://doi.org/10.1177/0034644619833655
- Yared, P. (2019). Rising government debt: Causes and solutions for a decades-old trend. *Journal of Economic Perspectives*, *33* (2), 115-140. https://doi.org/10.1257/jep.33.2.115