

# MACROECONOMIC UPDATE

## NEPAL

VOLUME. 6, NO.2

September 2018



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The views expressed in the Macroeconomic Update are those of the authors and do not necessarily reflect the views of the ADB, or its Board of Directors, or its member governments.

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## CONTENTS

<b>MACROECONOMIC UPDATE</b>	<b>Page</b>
Executive Summary	vii
A. Real Sector	1
B. Fiscal Sector	7
C. Monetary Sector	9
D. External Sector	14
 <b>ISSUE FOCUS</b>	
Disaster Risk Reduction in Nepal	19
 <b>APPENDICES</b>	
Appendix 1: Country Economic Indicators	26
Appendix 2: Country Poverty and Social Indicators	27

## ABBREVIATIONS

BFI = banks and financial institutions

CA = current account

FDI = foreign direct investment

GDP = gross domestic product

KV = kilovolt

M2 = broad money

NEPSE = Nepal Stock Exchange

NRB = Nepal Rastra Bank

SEZ = special economic zone

y-o-y = year-on-year

## NOTE

- i. The fiscal year (FY) of the Government ends in mid-July. FY before a calendar year denotes the year in which the fiscal year ends, e.g., FY2018 ended on 16 July 2018.
- ii. In this report, "\$" refers to US dollars.

## Executive Summary

1. **Nepal's economy grew by 5.9% (at basic prices) in FY2018, down from 7.4% a year earlier largely on the back of subdued agriculture output, as a result of floods of August 2017.** The agriculture sector expanded by only 2.8% in FY2018 after rising by 5.2% a year earlier. The industry sector expanded by 8.8% in FY2018, down from 12.4% a year earlier. The sector grew on expansion of manufacturing, construction and mining and quarrying activities. The manufacturing sub-sector expanded by 8.0% in FY2018, albeit down from 9.7% a year earlier, thanks to better management of electricity supply. The construction sub-sector expanded on the back of accelerated post-earthquake reconstruction along with other construction activities at sub-national levels. The services sector expanded by 6.6% in FY2018 after rising by 7.4% a year earlier. With the momentum gained in FY2017 as the economy recovered from the 2015 earthquakes and the 2015-2016 trade and supply disruptions, as well as prospects of a more stable socio-political environment in Nepal, tourists' arrival has been increasing, favoring 'hotel and restaurant' and 'travel and communication' sub-sectors.

2. **Economic growth in FY2019 will likely be 5.5%,<sup>1</sup> with a continued reversal to trend growth rate, but substantially higher than the average rate of 4.3% in the last ten years, FY2009-FY2018.** Growth will be supported by expectations of greater political stability following the 2017 elections, normal monsoon, and efforts to accelerate implementation of mega infrastructure projects. The monsoon season that usually lasts from June to September has so far been normal this fiscal year. The coverage of paddy plantation is reported to be above 95.0% because of timely and well-distributed rainfall.<sup>2</sup> The government is also making efforts to closely monitor and expedite the implementation of development projects. The *Upper Tamakoshi* Hydropower Project of 456 megawatt is projected to be completed within this fiscal year. The addition of this electricity to the national grid line will relieve Nepal from relying on power import from India during the wet season. The industry sector buoyed by increased availability of electricity supply and increased manufacturing and construction activities will likely expand by 7.2% in FY2019, albeit down from 8.8% a year earlier. Manufacturing sub-sector is expected to do well with the end of load-shedding since May 2018.<sup>3</sup> The services sector is forecast to grow by 6.1% in FY2019, down from 6.6% in FY2018. As in FY2018, wholesale and retail trade, financial intermediation and travel and tourism sub-sectors are expected to generate momentum in FY2019.

<sup>1</sup> At basic prices in constant terms.

<sup>2</sup> Current Macroeconomic and Financial Situation of Nepal: Based on annual data of 2017/18, NRB.

<sup>3</sup> Despite better management of electricity supply, the industrial sector was facing load-shedding of about 3-4 hours a day during peak time. As per the Nepal Electricity Authority, the industrial sector is now free from power cuts.

**3. Downside risks to outlook in FY2019 center on limited experience and capacity at sub-national levels and challenges to smooth implementation of federalism.** Lack of requisite legislation and staff, both technical and administrative, further clarification of mandates and responsibilities of the three tiers of government, and inconsistencies in revenue mobilization related to fees and taxes at sub-national levels are some of the major issues, affecting the smooth implementation of fiscal federalism. The effectiveness of federalism in Nepal will rely on how quickly and efficiently the federal government can recruit and/or depute staff and assist the sub-national governments in drafting key legislations. Further, sub-national governments will require significant capacity building in terms of program and project development, project implementation, grant utilization, and maintaining fiscal discipline. There is also a need for more resources to facilitate the functions of the new governments and ensure greater coordination among the governments for effective delivery of development programs.

**4. Inflation moderated largely on the back of subdued inflation in India to whose currency the Nepali rupee is pegged.** Average annual inflation moderated to 4.2% in FY2018, down from 4.5% a year earlier. Despite a spike in domestic oil prices, the other factors quelling inflation were ease in the supply of goods as trade returned to normalcy since February 2016. However, the average annual inflation is expected to rise to 6.0% in FY2019 from 4.2% a year earlier. The expansionary budget for FY2019 (an increase by 25.7%) compared to the revised total expenditure estimate for FY2018 and higher government expenditures under the new federal structure will raise inflationary pressure. The inflation forecast is also partly based on the assumption of favorable harvest, modest oil prices, rise in wage rate index and expectation of higher inflation in India.

**5. The execution rate of capital expenditures improved in FY2018 with a significant push toward budget implementation in the last months of the fiscal year.** Capital expenditures increased by 28.0% in FY2018, and the execution rate at 79.7% was well-above the average of 72.0% during FY2013-FY2017. Nonetheless, lack of project readiness and delays in procurement related processes compounded by short supply of construction materials and skilled labor force have hindered the smooth implementation of infrastructure projects. Moreover, the hasty nature of capital spending has continued with 55.6% spent in the last quarter and about 40.0% in the last month of FY2018, undermining the quality of capital projects. By contrast, recurrent expenditures were high with an annual growth of 34.3% and execution at 86.6% in FY2018. The



government expenditures (comprising recurrent and capital) in FY2018 were NRs 963.5 billion (32.0% of GDP), an increase of 32.5% from FY2017. The big increase in recurrent expenditures were due to election expenses and the fiscal transfer of about 8.0% of GDP to sub-national governments under the federal structure of governance.

**6. The government has been consistently doing well in meeting the revenue target.** In fact, government revenues for FY2018 exceeded the budget target by about 0.2% totaling NRs 731.4 billion, or 24.3% of GDP, an increase of 20.1% from FY2017. The revenue collection has primarily increased on higher import growth. Value added tax (VAT), income tax and customs duties are the largest contributors to revenue generation with their shares standing at 28.2%, 21.8%, and 18.8%, respectively. Nonetheless, lower-than-planned expenditures and a sustained rise in revenue mobilization resulted in a lower budget deficit than the envisaged target for FY2018. Fiscal deficit widened to 6.7% of GDP in FY2018, down from the original budget estimate of 11.2% of GDP. Nonetheless, the deficit has been widening with increased government expenditures and the need for fiscal transfers to sub-national levels.

**7. Merchandise trade deficit surged on higher import of construction materials and capital goods.** Merchandise exports increased by 15.8% to \$896.6 million in FY2018, higher than the growth of 12.1% a year earlier. Exports of cardamom, cinnamon, ginger, polyester yarn, sackings, and zinc sheet, among others increased in FY2018. While there has been a growth in the registration of new manufacturing firms in FY2018 with expectations of a more favorable socio-political environment, more needs to be done to boost the manufacturing sub-sector. For instance, enhancing road connectivity, availing additional electricity to newly established industries in the Bhairahawa Special Economic Zone, simplifying and speeding up duty rebate for export-oriented firms, reducing import tariffs for intermediate goods used for export-oriented products, simplifying the FDI regulations and promoting a competitive structure in key markets are some of the major reforms to be initiated. Merchandise imports, on the other hand, increased by 26.9% to \$11.8 billion in FY2018, albeit down from the growth of 37.1% a year earlier. Imports surged on the back of remittance income and higher domestic demand compounded by higher oil prices. Imports particularly of construction materials, vehicles and spare parts and petroleum products increased in FY2018, widened trade deficit to \$10.9 billion, or 37.7% of GDP, in FY2018, up from \$8.5 billion a year earlier.

**8. External sector stability is vulnerable over the medium-term due to a rising trade deficit.** Though remittance inflow has been growing healthily, a substantial increase in remittance income to control the ballooning current account deficit is unlikely in near future. On the other hand, rising trade deficit and falling net income are likely to further widen the current account deficit in coming years. The current account (CA) deficit of \$2.4 billion, or 8.2% of GDP, in FY2018 is significantly higher than the deficit of \$95.7 million, or 0.4% of GDP, a year earlier. The government aims to reduce the CA deficit over the medium-term via minimizing trade deficit through export promotion of competitive products and services, strengthening supply-side capacity and enhancing access of goods and services to foreign markets. FDI increased by 32.0% to \$168.3 million in FY2018, up from \$127.5 million a year earlier. Though foreign investment has risen in areas such as hydropower and cement, its share of GDP at 0.6% is dismal. Despite huge CA deficit, robust financial inflows led to an overall balance of payments surplus of \$9.2 million in FY2018 vis-à-vis a surplus of \$775.2 million in FY2017. Gross foreign exchange reserves at \$10.1 billion in FY2018 is sufficient to cover imports of about 9.4 months of goods and services.

**9. This edition of Macroeconomic Update's Issue Focus sheds light on some major issues and challenges to disaster risk reduction and highlights some of the key lessons on disaster management based on the Asian Development Bank's (ADB) experiences in Nepal.** The country is highly susceptible to natural hazards given its topography and diverse climatic conditions. The mountainous belt is at risk of landslide and soil erosion, the Himalayan belt is at risk of avalanche and glacial lake outburst flood (GLOF), and the Terai belt is vulnerable to flood, drought and fire. The situation is further aggravated by unplanned human settlements. This issue focus discusses the importance of multi-stakeholder approach, donor coordination and bundling of soft assistance with hard investments for effective disaster risk management.

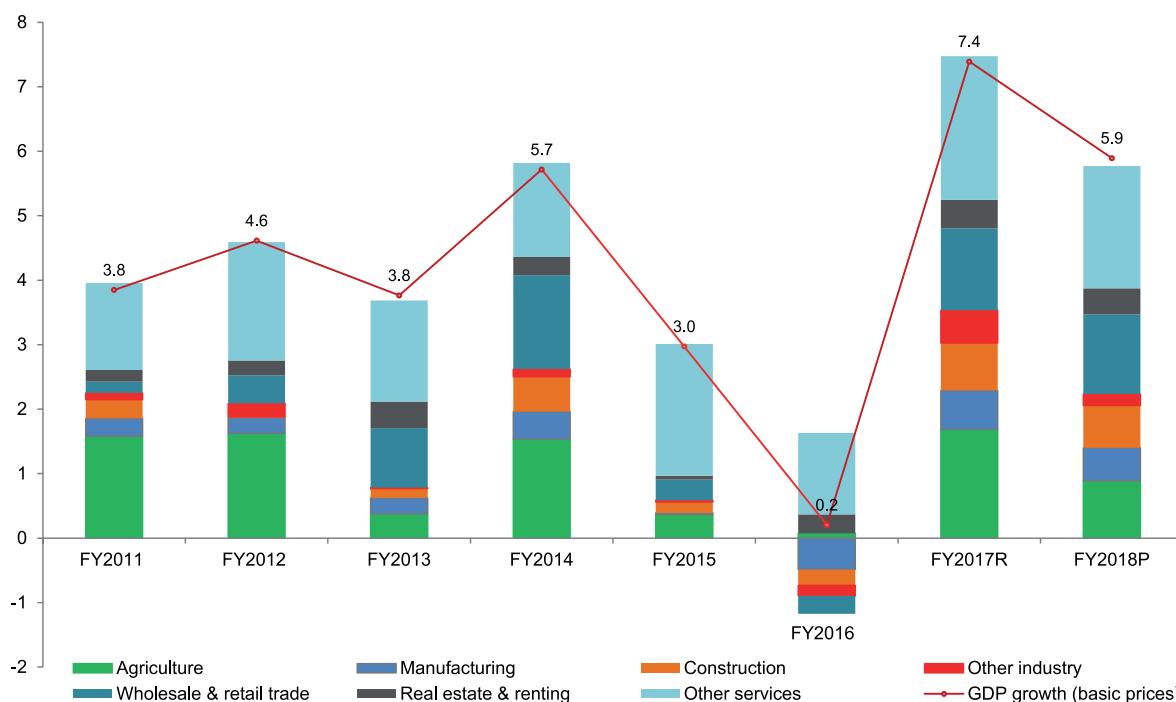
# MACROECONOMIC UPDATE

## A. Real Sector

### I. Economic performance in FY2018

1. Nepal's economy grew by 5.9%<sup>1</sup> in FY2018, down from 7.4%<sup>2</sup> a year earlier (Figure 1). This fall is largely on the back of subdued agriculture output, resultant of floods of August 2017. The sector expanded by only 2.8% in FY2018 after rising by 5.2% in FY2017. The floods of August 2017 devastated paddy output<sup>3</sup> in the southern tier of Nepal lowering its output by 1.5% compared to the preceding year (Figure 2). However, an increased production of other crops like maize, millet and wheat in FY2018 supported agriculture growth.<sup>4</sup>

Figure 1: Supply-side contributions to GDP growth (% points)



Source: Central Bureau of Statistics

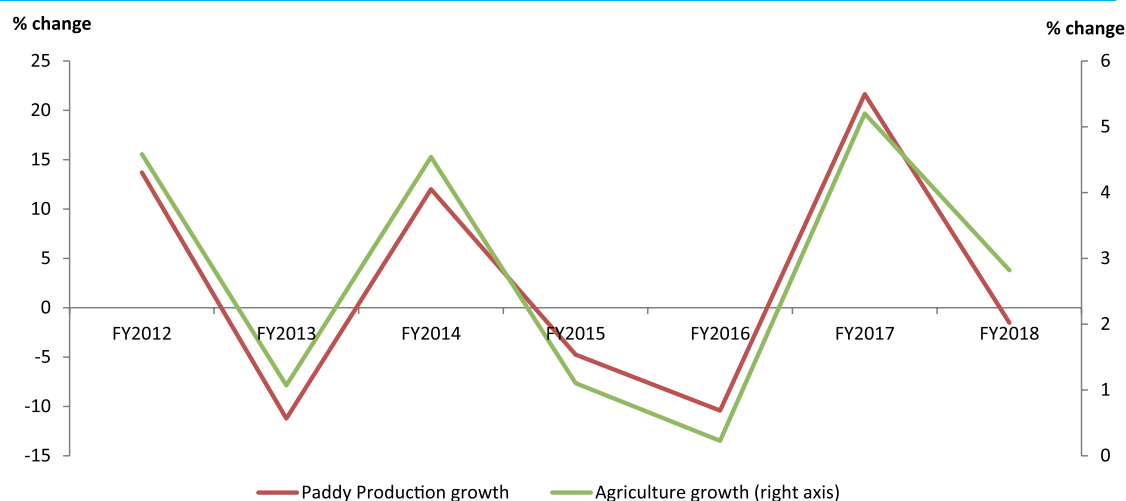
<sup>1</sup> Preliminary estimate of Central Bureau of Statistics, Government of Nepal. This is GDP growth rate in basic prices. GDP growth rates in market prices were 6.3% in FY2018 and 7.9% in FY2017. GDP growth in market prices have generally been higher by an annual average of around 0.3% points during FY2010-FY2018.

<sup>2</sup> Revised estimate of Central Bureau of Statistics, Government of Nepal.

<sup>3</sup> Paddy output accounts for nearly 7% of GDP.

<sup>4</sup> Ministry of Finance, Government of Nepal. Economic Survey 2017/18.

Figure 2: Paddy production and agriculture growth



Source: Ministry of Agriculture and Livestock Development

2. The industry sector, with contribution of about 15.0%<sup>5</sup> of GDP, expanded by 8.8% in FY2018, down from 12.4% a year earlier. The sector grew on expansion of manufacturing, construction and mining and quarrying activities. The manufacturing sub-sector<sup>6</sup> expanded by 8.0% in FY2018, albeit down from 9.7% a year earlier, thanks to better management of electricity supply (Figure 3; Figure 4). The construction sub-sector expanded by 10.6% in FY2018 after rising by 12.4% a year earlier on the back of construction of office buildings at sub-national levels and the ongoing post-earthquake reconstruction<sup>7</sup> (Table 2). Several small sized hydropower projects such as *Sabha khola*, *Thapa khola*, *Madkyu khola* and *Mai sana* cascade commenced operation, raising the installed electricity capacity by 10.3% in FY2018 (Table 1).<sup>8</sup> However, the overall industrial growth in FY2018 is lower compared to the preceding year as the growth in FY2017 was largely pushed by low base year effect.

Table 1: Electricity demand and supply

Item	FY2015	FY2016	FY2017	FY2018	FY2019E
Installed capacity (MW) <sup>9</sup>	787	856	972.5	1072.6	1902.8
Peak demand (MW)	1292	1385	1444.1	1508.16	1522.2

MW = megawatt; E = estimate  
Source: Nepal Electricity Authority

<sup>5</sup> In nominal terms.

<sup>6</sup> Hongshi-Shivam Cement Private Limited, the largest cement factory of Nepal, began its commercial production since May 2018.

<sup>7</sup> Out of 807,486 eligible for private housing grants, 270,824 private houses have been constructed and 541,746 houses are under construction as of 23rd August 2018. The sum of the figures is higher than the total eligible because the total households surveyed for reconstruction were 996,582. So, this implies that some have either reconstructed or been reconstructing their houses on their own. Data available at: <http://nra.gov.np/en/mapdistrict/datavisualization>.

<sup>8</sup> The national accounts present an aggregate data for electricity, water and gas as one sub-sector. Data from NEA shows that the installed capacity of hydroelectricity increased by 10.3% in FY2018. But when we see the combined growth of electricity, water and gas, the sub-sectoral growth in FY2018 was 5.8%. Lack of visible improvements in water and gas output may have dragged down the sub-sectoral growth.

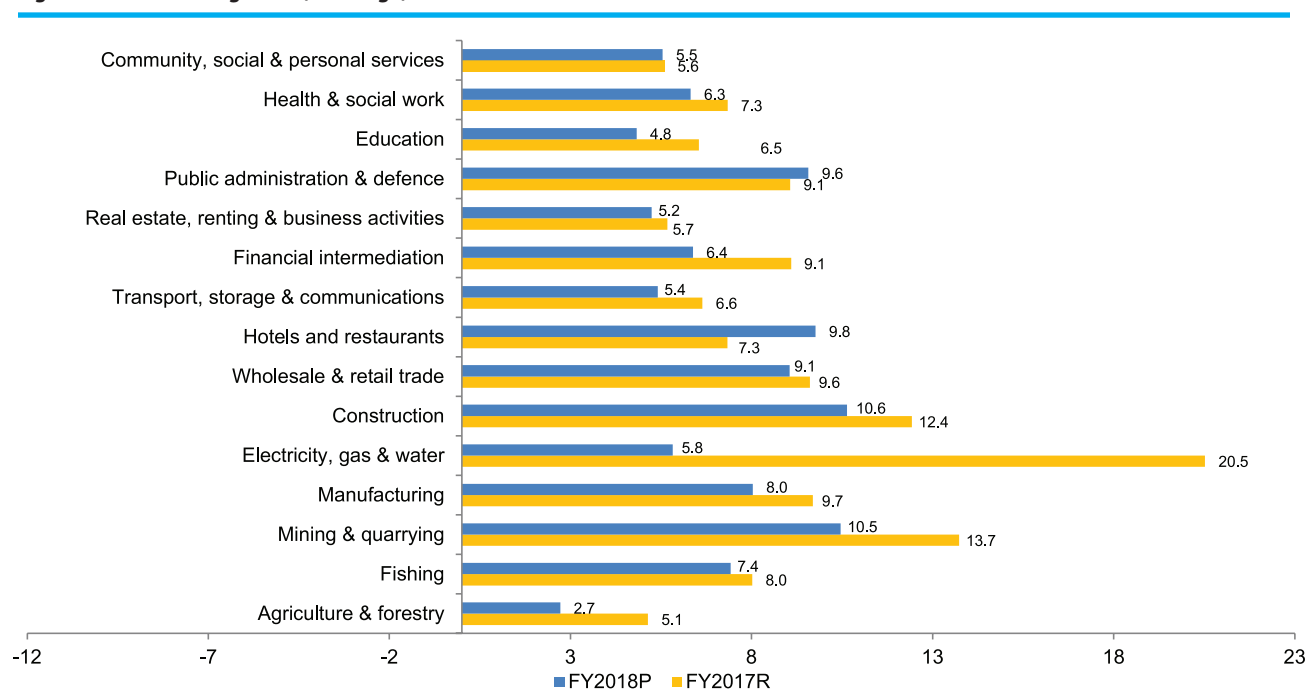
<sup>9</sup> This includes hydro power generation of both Nepal Electricity Authority and Independent Power Producers.

**Table 2: Reconstruction status of public infrastructure**

Status <sup>10</sup>	Health center	Government buildings	Archaeological heritages	Educational institutions	Security buildings	Drinking water
Targeted	1197	415	753	7553	383	3212
Completed	643	248	185	3816	93	791
Under construction	145	145	309	2369	112	670
Construction not yet started	409	22	259	1368	178	1751

Note: Targeted includes both reconstruction and retrofitting.  
Source: National Reconstruction Authority

3. The services sector, which accounts for slightly more than half of GDP, expanded by 6.6% in FY2018 after rising by 7.4% a year earlier. With the momentum gained in FY2017 as the economy recovered from the 2015 earthquakes and the 2015-2016 trade and supply disruptions, as well as, prospects of a more stable socio-political environment in Nepal, tourists' arrival has been increasing, favoring 'hotels and restaurants' and 'transport, storage and communications' sub-sectors. The hotel and restaurant sub-sector expanded by 9.8% in FY2018, up from 7.3% a year earlier. Economic activities have spurred at sub-national levels evident with the continued expansion of wholesale and retail trade, financial intermediation and real estate, renting and business activities. (Figure 3).

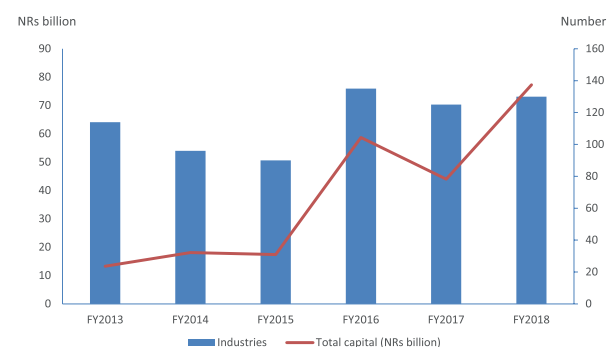
**Figure 3: Sub-sectoral growth (% change)**

Source: Central Bureau of Statistics

<sup>10</sup> As of 23 August 2018.

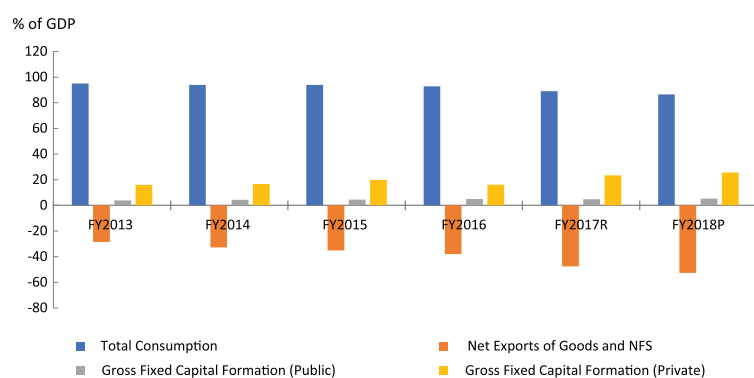
4. From demand side, high consumption prevailed in FY2018 induced by remittance income. Consumption expenditures accounted for 86.5% of GDP in FY2018, albeit down from 89.0% of GDP a year earlier (Figure 5).<sup>11</sup> Both public and private investments have surged in FY2018 with fixed investment expanding by 15.7% to account for 30.8% of GDP, up from 28.3% of GDP in the preceding year.<sup>12</sup> Private investment has ramped up in manufacturing, energy and tourism related industries (Table 3). With the strong increase in domestic demand, especially investment, imports particularly of construction materials such as cement, MS billet and capital goods like machineries, plants and heavy-duty vehicles have surged, widening trade deficit. This, in turn, has led to a fall in net exports in FY2018.

**Figure 4: Manufacturing industries registered with the Department of Industry**



Source: Department of Industry

**Figure 5: Demand-side share of GDP**



Source: Central Bureau of Statistics

**Table 3: Firms/Investment projects registered with the Department of Industry**

Types	FY2017		FY2018	
	Number	Total capital (NRs billion)	Number	Total capital (NRs billion)
Agro and forestry based	25	3.3	22	2.5
Construction	3	1.7	4	4.7
Energy based	20	82.4	39	233.9
Information technology	14	0.9	24	0.7
Manufacturing	125	43.9	130	77.3
Mineral	3	0.08	4	2.4
Service <sup>13</sup>	166	15.9	114	5.1
Tourism	154	15.0	159	23.8
<b>Total</b>	<b>510</b>	<b>163.2</b>	<b>496</b>	<b>350.5</b>

Source: Department of Industry

<sup>11</sup> In real terms.

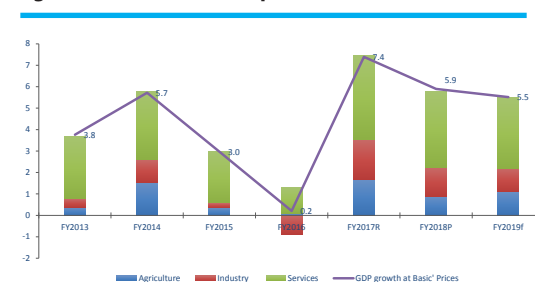
<sup>12</sup> In real terms.

<sup>13</sup> This includes investments in businesses such as information and technology processing, restaurant, cargo handling, training centers etc.

5. Economic growth in FY2019 will likely be 5.5%, with a continued reversal to trend growth rate, but substantially higher than the average rate of 4.3% in the last ten years, FY2009-FY2018 (Figure 6). Growth will be supported by expectations of greater political stability following the 2017 elections, normal monsoon, and efforts to accelerate implementation of mega infrastructure projects. The successful elections in 2017 of 761 governments (1 federal, 7 provincial, and 753 local) have raised expectations among the public for better governance and service delivery. However, the challenges to meet these expectations in the near term are formidable. Downside risks to outlook in FY2019 centers on limited experience and capacity at sub-national levels and challenges to smooth implementation of fiscal federalism. Lack of requisite legislation and staff,<sup>14</sup> both technical and administrative, and inconsistencies in revenue mobilization<sup>15</sup> related to fees and taxes at sub-national levels are some of the major issues, affecting the smooth implementation of fiscal federalism. The effectiveness of federalism in Nepal will rely on how quickly and efficiently the federal government can recruit and/or depute staff and assist the sub-national governments in drafting key legislations. Further, sub-national governments will require significant capacity building in terms of program and project development, project implementation, grant utilization, and maintaining fiscal discipline. There is also a need for more resources to facilitate the functions of the new governments and ensure greater coordination among the governments for effective delivery of development programs.

6. The monsoon season that usually lasts from June to September has so far been normal this fiscal year. The coverage of paddy plantation is reported to be above 95.0% because of timely and well-distributed rainfall.<sup>16</sup> The government is also making efforts to closely monitor and expedite the implementation of development projects. For instance, Project Implementation Directive Committee will be formed under the chairmanship of Prime Minister to periodically undertake result-based monitoring of mega projects. A separate Act will be formulated to effectively implement mega projects of national significance. Public Expenditure Review Commission has been formed this fiscal year to advise the government on prioritization and restructuring of development projects including the overall public expenditure system. The *Upper Tamakoshi* Hydropower Project<sup>17</sup> of 456 megawatt is projected to be completed within this fiscal year.<sup>18</sup> The addition of this hydropower project to the national grid line will relieve Nepal from relying on

**Figure 6: GDP forecast (% points)**



R =revised; P =provisional; and F =forecast  
Source: Central Bureau of Statistics; NRM staff estimates

<sup>14</sup> A recent report by the Ministry of Federal Affairs and General Administration shows that 25,000 additional staff will be required, in addition to the existing 86,000 staff, for running the three tiers of governments.

<sup>15</sup> Some local level governments have hiked local taxes and registration fees to which public has expressed strong dissatisfaction. Moreover, in the absence of Natural Resources and Fiscal Commission, confusions have emerged in terms of taxation at sub-national levels leading to double taxation on same economic activity.

<sup>16</sup> Current macroeconomic and financial situation based on annual data of 2017/18, NRB.

<sup>17</sup> It is peaking run-of-the-river project and is completely financed by domestic financial institutions, companies, and the public.

<sup>18</sup> About 94.0% of the civil work of this project has been completed. For details, please see: <http://kathmandupost.ekantipur.com/news/2018-03-01/upper-tamakoshi-hydro-readying-to-issue-shares.html>

power import from India during the wet season. Further, several small and medium sized hydropower projects are expected to be completed by FY2019, boosting the country's total generation capacity (see Table 1 above). Besides generation of hydroelectricity, several transmission lines under construction such as *Thankot-Chapagaon-Bhaktapur* 132 KV line, *Kabeli* corridor 132 KV line, and *Kohalpur-Mahendranagar* 132 KV line, among others, are expected to be completed in FY2019.

7. The agriculture sector is expected to expand by 3.5% in FY2019, up from a growth of 2.8% in FY2018 assuming a good harvest given the favorable monsoon. The federal budget for FY2019 aims at expanding the 'Prime Minister Agriculture Modernization Project (2016-2025)' to boost agricultural productivity. This project envisions enhancing agricultural productivity and its competitiveness, achieving self-reliance on agro-products of comparative advantage and reducing the greater reliance on agriculture for livelihood. The provincial governments have as well prioritized the agriculture sector in their first-ever respective budgets.

8. The industry sector buoyed by increased availability of electricity supply and increased manufacturing and construction activities will likely expand by 7.2% in FY2019, albeit down from 8.8% in FY2018. Manufacturing sub-sector is expected to do well with the end of load-shedding since May 2018. The business firms that had signed agreements with the government to establish factories in Bhairahawa special economic zone (SEZ) have begun constructing their factories after getting the required quantum of electricity supply.<sup>19</sup> This momentum will woo other investors to set up plants in the SEZ. Nevertheless, persistent issues related to duty rebate, a one-window policy for streamlining investment, poor infrastructure and challenges related to smooth implementation of federalism may dampen investor confidence, limiting industrial growth in FY2019. The goal of one-window policy to ensure inter agency coordination for simplifying and expediting the investment process has not been effective so far. The duty drawback facility is available for export-oriented manufacturing firms, but the process is cumbersome often requiring years to get refund.

9. The services sector is forecast to grow by 6.1% in FY2019, down from 6.6% in FY2018. As in FY2018, wholesale and retail trade, financial intermediation and travel and tourism sub-sectors are expected to generate momentum in FY2019 as well. Commercial banks have so far opened branch offices in 550 local levels, and they are committed to opening branch offices in the remaining 203 local levels

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<sup>19</sup> The Himalayan Times (2018). Firms finally start building factories in Bhairahawa SEZ. Published on 29 June 2018.



once the necessary infrastructure such as roads, internet and security measures are in place.<sup>20</sup> Tourists' arrival has been increasing partly as a reflection of political stability and sustained peace in the country (Figure 7). Nonetheless, record arrival of tourists<sup>21</sup> as envisaged by the budget for FY2019 is unlikely to be met given the limited tourism infrastructure.

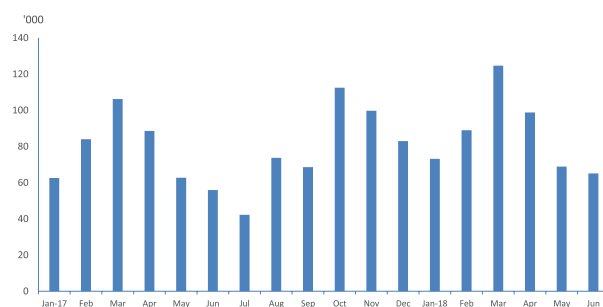
10. From demand perspective, rise in investment and buoyant government expenditures will induce growth in FY2019. Private investment may stimulate with the increased availability of electricity and expectations of greater political stability following the successful elections<sup>22</sup> in 2017. The proposed 'Project Implementation Directive Committee' under the chairmanship of Prime Minister is expected to fast-track the implementation of mega infrastructure projects, providing some support to public investment. Government expenditures, including 9.7% of GDP in fiscal transfers to sub-national governments, are about 34.3% of GDP, compared to the revised 31.2% of GDP estimate of FY2018. The spending of sub-national governments will also likely induce growth in FY2019. Private consumption, on the other hand, may moderate owing to a modest rise in remittance and depreciation of Nepali rupee vis-a-vis the US dollar. The trade deficit will further widen in FY2019 with rising imports of oil and non-oil products.

## B. FISCAL SECTOR

### I. Expenditure performance

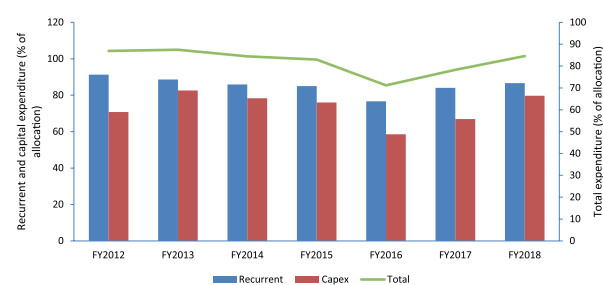
11. The execution rate of capital expenditures has improved in FY2018 because of the new government's push toward budget implementation in the last months of the fiscal year. Capital expenditures increased by 28.0% in FY2018, and the execution rate at 79.7% was well-above the average of 72.0% during FY2013-FY2017 (Figure 8). Nonetheless, lack of project readiness and delays in procurement related processes compounded by short supply of construction materials and skilled labor force<sup>23</sup> have been affecting the smooth implementation of infrastructure projects. Moreover, the hasty nature of capital spending has continued with 55.6% spent

Figure 7: Tourist inflow has increased



Source: Department of Immigration

Figure 8: Budget execution



Source: Financial Comptroller General Office

<sup>20</sup> Current macroeconomic and financial situation based on annual data of 2017/18, NRB.

<sup>21</sup> The budget for FY2019 aims at bringing 2 million tourists by 2020, more than doubling the 2017 arrivals, under 'Visit Nepal 2020' campaign.

<sup>22</sup> Local level elections were held on 14 May, 28 June and 18 September of 2017. Legislative elections were held on 26 November and 7 December 2017.

<sup>23</sup> The unskilled youths tend to migrate for foreign employment after acquiring certain skill during their short stint at the manufacturing and construction firms. In agriculture, the greater out-migration of youths has led to feminization of the agriculture workforce.

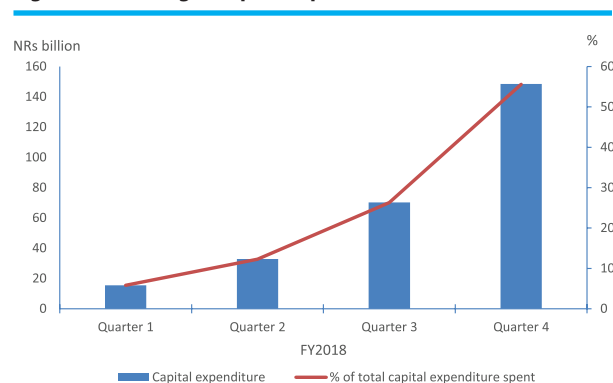
in the last quarter and about 40.0% in the last month of FY2018, undermining the quality of capital projects<sup>24</sup> (Figure 9).

12. By contrast, recurrent expenditures were high with an annual growth of 34.3% and execution at 86.6% in FY2018 (Figure 8). The government expenditures (comprising recurrent and capital) in FY2018 were NRs 963.5 billion (32.0% of GDP), an increase of 32.5% from FY2017. The big increase in recurrent expenditures were due to election expenses and the fiscal transfer of about 8.0% of GDP to sub-national governments under the federal structure of governance.

## II. Revenue performance

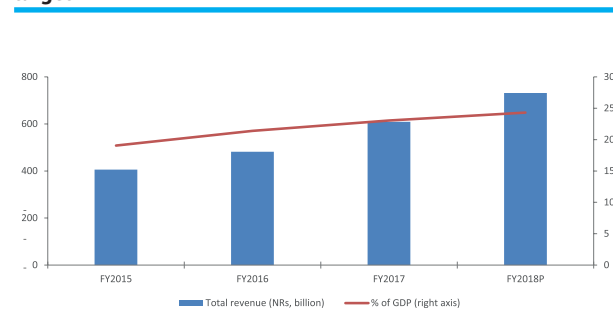
13. Government revenues for FY2018 exceeded the budget target by about 0.2% totaling NRs 731.4 billion, or 24.3% of GDP, an increase of 20.1% from FY2017 (Figure 10). The revenue collection has primarily increased on higher import growth. VAT, income tax and customs duties are the largest contributors to revenue generation with their shares standing at 28.2%, 21.8%, and 18.8%, respectively (Figure 11). Besides higher import growth, tax reforms such as systematic analysis of tax policies, follow up on non-compliance and non-payment and decrease in compliance costs are some other factors boosting revenue generation.

Figure 9: Bunching of capital expenditure



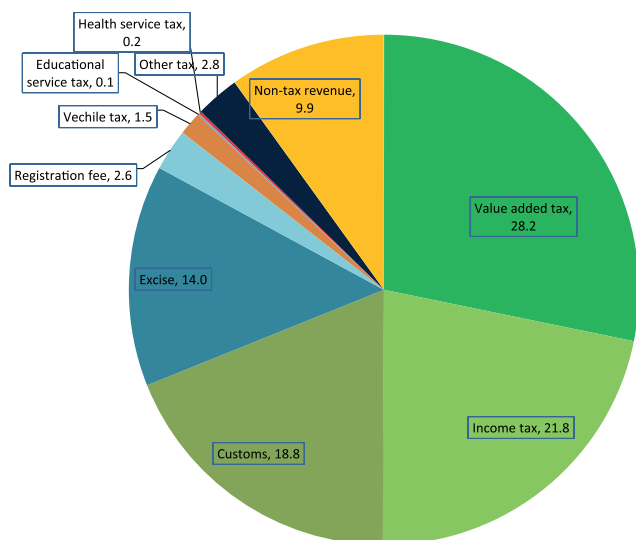
Source: Financial Comptroller General Office

Figure 10: Revenues are consistently meeting the government's target



Source: Financial Comptroller General Office

Figure 11: Composition of total revenue in FY2018



Source: Nepal Rastra Bank

<sup>24</sup> The huge accumulation of capital expenses towards the last quarter of the fiscal year is also due to late disbursement of funds for civil works completed previously.

### III. Budget balance

14. Lower-than-planned expenditures and a sustained rise in revenue mobilization resulted in a lower budget deficit than the envisaged target for FY2018. Fiscal deficit widened to 6.7% of GDP in FY2018, down from the initial budget estimate of 11.2% of GDP. The deficit has been widening with increased government expenditures and the need for fiscal transfers to sub-national levels (Figure 12).

### IV. Public debt

15. Nepal faces low debt distress given the high level of official concessional borrowing at longer maturity.<sup>25</sup> The government's total public debt in FY2018 is NRs 894.5 billion (29.7% of GDP), up from NRs 697.4 billion (26.4% of GDP) a year earlier (Figure 13). The government raised external debt of NRs 74.9 billion (2.5% of GDP) in FY2018, an increase of 29.1% from the preceding year. Likewise, the government raised internal debt of NRs 145.0 billion (4.8% of GDP) in FY2018, a substantial increase of 64.1% from FY2017 to meet higher financing requirements.

## C. MONETARY SECTOR

### I. Inflation

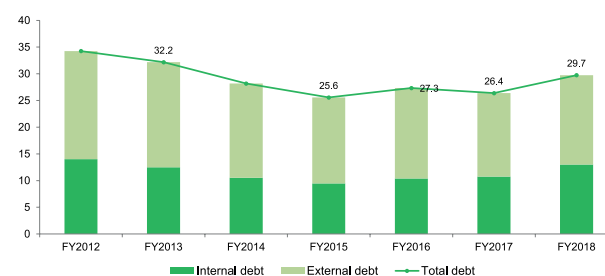
16. Average annual inflation moderated to 4.2% in FY2018, down from 4.5% a year earlier (Figure 14). Inflation moderated largely on the back of subdued inflation in India to whose currency the Nepali rupee is pegged. The inflation wedge differential fell to -0.2% in FY2018 from 1.1% in FY2017. Despite a spike in domestic oil prices,<sup>26</sup> the other factors quelling inflation were ease in the supply of goods as trade returned to normalcy since February 2016 and decent agriculture output. Average annual food inflation that accounts for 44.0% of the consumer price basket increased by 2.8% in FY2018, up from 2.0% in FY2017 (Figure 15). Except for pulses and legumes and spices, consumer prices of almost all food items slightly increased in FY2018 compared to the previous year. Average annual non-food inflation moderated to 5.3% in FY2018, down from 6.5% a year earlier, on the back of slow rise in prices of health and transportation services and a slight fall in the price of communication services (Figure 16).

Figure 12: Fiscal balance (% of GDP)



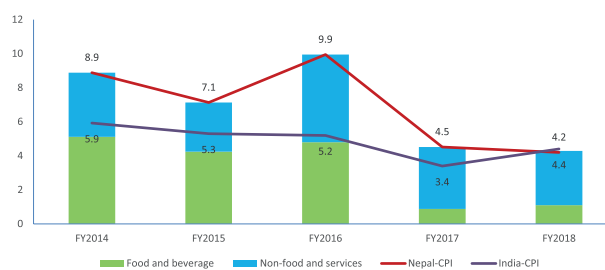
Source: Financial Comptroller General Office; Ministry of Finance

Figure 13: Public debt (% of GDP)



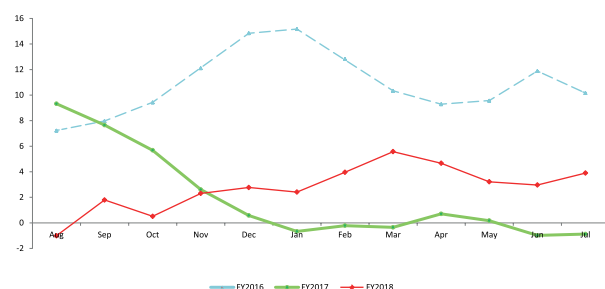
Source: Financial Comptroller General Office; Nepal Rastra Bank

Figure 14: Contribution to overall inflation (% points)



Source: Nepal Rastra Bank

Figure 15: Food inflation (y-o-y)



Source: Nepal Rastra Bank

<sup>25</sup> For details, please see: <<https://www.imf.org/external/pubs/ft/dsa/pdf/2017/dsacr1774.pdf>>

<sup>26</sup> The prices of diesel/liter, petrol/liter and kerosene/liter increased by 23.2%, 10.0% and 23.2%, respectively from 1st November 2017 to 17th June 2018.

## II. Inflation outlook for FY2019

17. Average annual inflation is expected to rise to 6.0% in FY2019 from 4.2% in FY2018 (Figure 17). The expansionary budget for FY2019 (an increase by 25.7%) compared to the revised total expenditure estimate for FY2018 and higher government expenditures under the new federal structure will raise inflationary pressure. The inflation forecast is also partly based on assumption of favorable harvest, modest oil prices,<sup>27</sup> rise in wage rate index<sup>28</sup> and expectation of higher inflation in India.

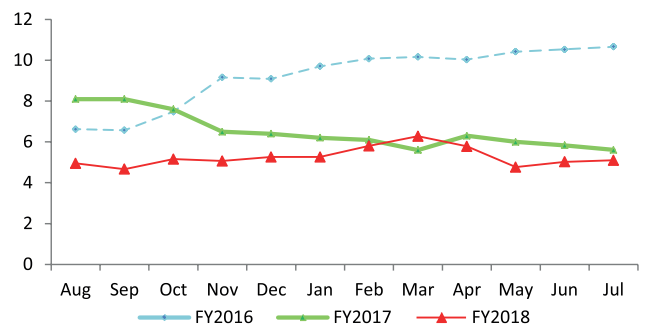
## III. Money supply

18. Broad money (M2) supply grew by 19.4% in FY2018, up from 15.5% a year earlier (Figure 18). M2 grew largely on the back of rising net domestic assets. While net foreign assets increased slightly by 0.1% in FY2018 after rising by 8.6% a year earlier, net domestic assets increased by 31.8% in FY2018 after rising by 20.6% a year earlier. Despite a fall in out-migration for foreign employment, remittance growth has remained healthy. Credit to private sector grew by 22.3% in FY2018, up from the growth of 18.0% in the preceding year.

## IV. Deposit and credit

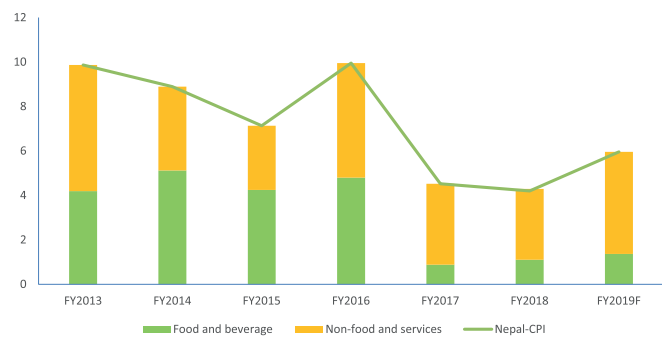
19. While growth in deposit collection was sluggish in the first three quarters of FY2018, it accelerated in the last quarter with the bunching of capital expenditures. The total deposit collection of BFIs grew by 19.4% in FY2018, up from 12.6% a year earlier (Figure 19). The deposit collection of development banks and finance companies increased by 30.5% and 21.6%, respectively y-o-y in FY2018 while that of commercial banks increased moderately by 18.2%. This is mainly due to higher interest rates on deposits with development banks and

Figure 16: Non-food inflation (y-o-y)



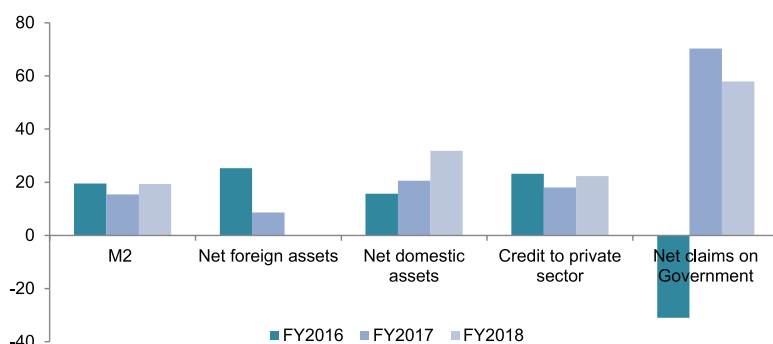
Source: Nepal Rastra Bank

Figure 17: Inflation forecast for FY2019 (% points)



Source: Nepal Rastra Bank; NRM staff estimates

Figure 18: Monetary sector (% change)



Source: Nepal Rastra Bank

<sup>27</sup> The average international crude oil prices are expected to drop by 2.8% from \$72.0/barrel in 2018 to \$70.0/barrel in 2019

<sup>28</sup> The annual average wage rate index has been rising in recent years. It increased by 7.0% in FY2016, 13.4% in FY2017 and 5.3% in FY2018.

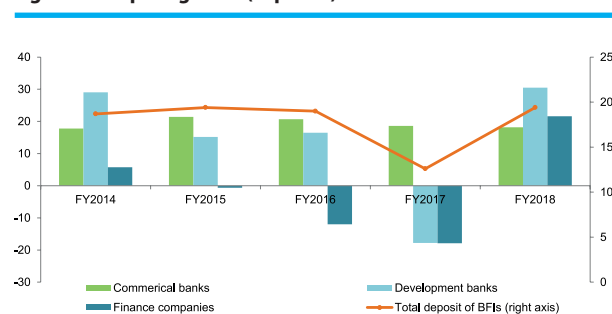
finance companies vis-à-vis commercial banks, especially with a likely shift from investing in share market to deposits as evident with the declining stock market starting in mid-January 2018.

20. Total credit disbursement of BFIs increased by 22.0% in FY2018, up from 18.1% a year earlier (Figure 20). Loans and advances of commercial banks, development banks and finance companies increased by 23.2%, 28.4%, and 19.0%, respectively in FY2018. Of the total sector wise credit, wholesale and retail trade constituted the biggest share at 22.0%, followed by productions at 16.4%, construction at 10.4% and finance, insurance and fixed assets at 8.4%. Real-estate, hire purchase and margin loans grew by 12.7%, 14.5% and 1.5%, respectively in FY2018, down from 16.5%, 35.6% and 7.5% a year earlier (Figure 21). The tightening of credit to core capital-plus deposit (CCD) ratio<sup>29</sup> and reducing loan to value (LTV)<sup>30</sup> ratio in real estate sector led to a significant moderation in credit disbursement to these products. The share of credit to real estate in FY2018 was 5.9%. The Monetary Policy for FY2018 had mandated commercial banks, development banks and finance companies to disburse a minimum of 25%, 15% and 10%, respectively of their total loan portfolios to productive sectors. By mid-July 2018, the shares of loans to agriculture and tourism<sup>31</sup> sectors in BFIs were 5.6% and 3.5%, respectively. Likewise, commercial banks, development banks and finance companies were mandated to lend a minimum of 5.0%, 4.5% and 4.0%, respectively, of their total loan portfolios to the deprived sector.<sup>32</sup> As of mid-July 2018, such credit disbursements of BFIs stood at 5.7%.

## V. Liquidity management

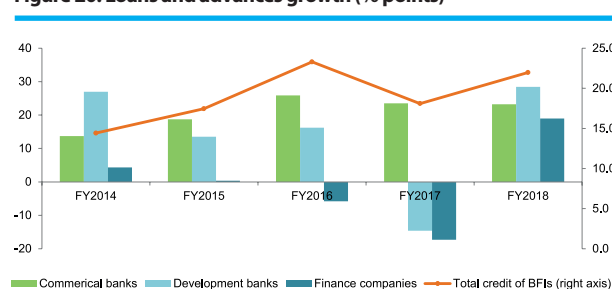
21. Liquidity shortage had emerged intermittently over the past two years due to chronic underspending nature of capital budget in the first three quarters of the fiscal year and an increased collection of domestic debt since FY2018. The NRB has actively intervened through monetary policy operations for liquidity management. The central bank injected liquidity of NRs107.3 billion, or 3.6% of GDP, into the economy via 14 days repo auction and outright purchase auction in FY2018 vis-à-vis NRs61 billion (2.3% of GDP) a year earlier. The NRB also

Figure 19. Deposit growth (% points)



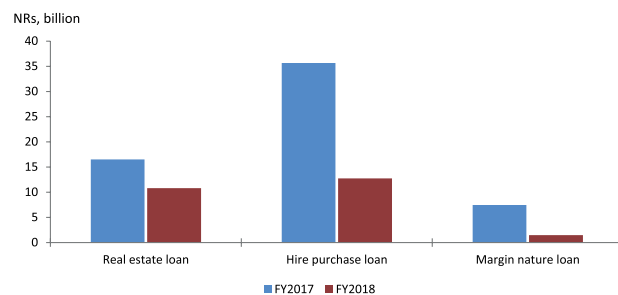
Source: Nepal Rastra Bank

Figure 20. Loans and advances growth (% points)



Source: Nepal Rastra Bank

Figure 21. Product loans (% change)



Source: Nepal Rastra Bank

<sup>29</sup> To minimize credit lending to unproductive sectors, NRB directed BFIs to strictly maintain credit to core capital-plus-deposit (CCD) ratio of 80%. Though this rule existed, the BFIs aggressively extended credit, exceeding their CCD limit. During the mid-year review of Monetary Policy for FY2017, NRB allowed BFIs to deduct 50% of their total credit lent to productive sectors while calculating CCD ratios. But, this facility had been removed since FY2018.

<sup>30</sup> To minimize the risks associated with real estate lending, NRB had capped the lending ratio. BFIs can lend only up to 25.0% of their total credit to real estate sector. Likewise, loan-to-value (LTV) ratio in real estate sector within Kathmandu valley has been reduced from 50% to 40%, while the ratio outside Kathmandu valley has been kept unchanged at 50%.

<sup>31</sup> It includes lending to hotels as well.

<sup>32</sup> It refers to micro credit lending to socio-economically disadvantaged communities residing in rural areas.

mopped up a total of NRs195.0 billion (6.5% of GDP) in FY2018, up from NRs124.4 billion a year earlier.

## VI. Interest rate

22. To address short-term interest rate volatility, NRB had introduced an interest rate corridor (IRC) since FY2017. The policy and floor rates then were determined based on weighted average interbank rate of commercial banks. But since FY2018, the policy and floor rates were fixed at 5.0% and 3.0%, respectively. With the implementation of IRC, the short-term interest rate volatility appears contained from December 2017 onwards. The idea is to maintain the weighted average interbank interest rate of commercial banks near policy rate, thereby attaining short-term interest rate stability (Figure 22). The weighted average interbank rate of commercial banks rose by more than 230 basis points y-o-y in FY2018.<sup>33</sup> The average annual weighted average spread rate of commercial banks at 5.5% in FY2018 is in line with the NRB's goal of containing interest rate spread at 5.0% (Figure 23). However, the commercial banks will have to gradually decrease the interest rate spread to 4.5% by mid-July 2019 as per the Monetary Policy for FY2019.

## VII. Capital market

23. The NEPSE index fell sharply by 23.4% to 1,212.4 points in mid-July 2018 from 1582.7 points compared to the corresponding period a year earlier (Figure 24).<sup>34</sup> The stock prices in the secondary market have been falling for several reasons. First, the NRB has tightened margin lending since FY2018 such that the BFIs can extend credit up to 40.0% of core capital

Figure 22: Weighted average interbank and 91-day treasury bills rate (%)

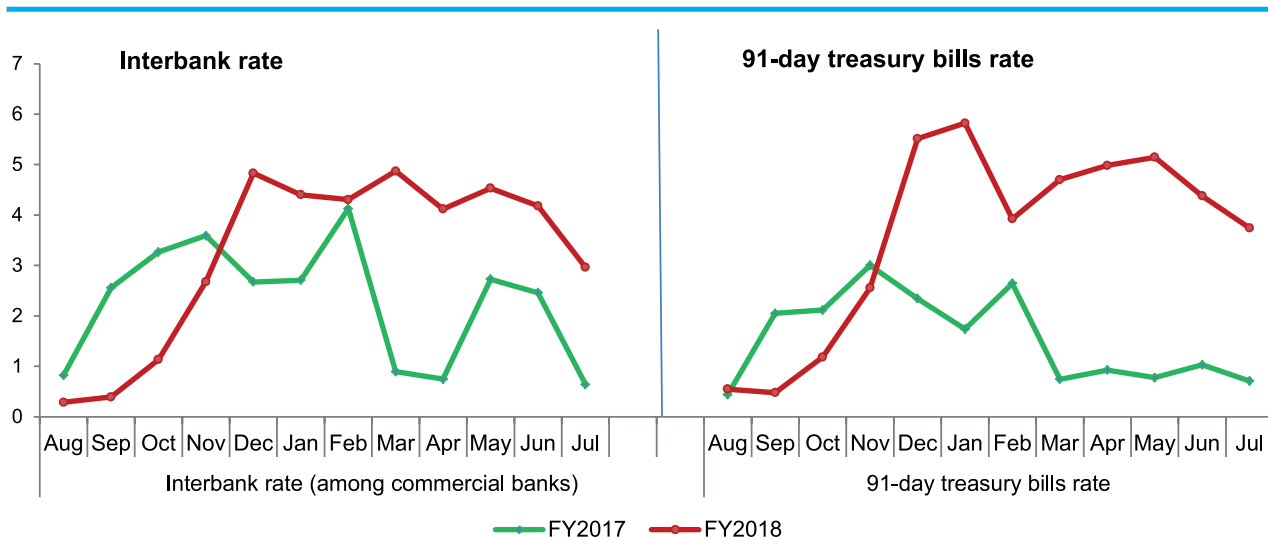
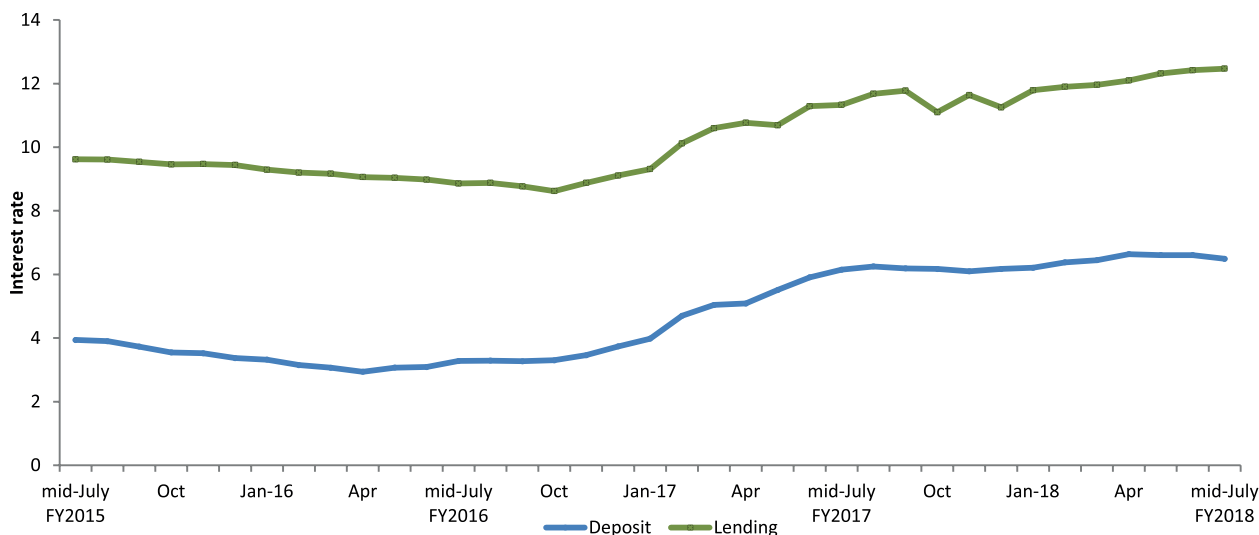


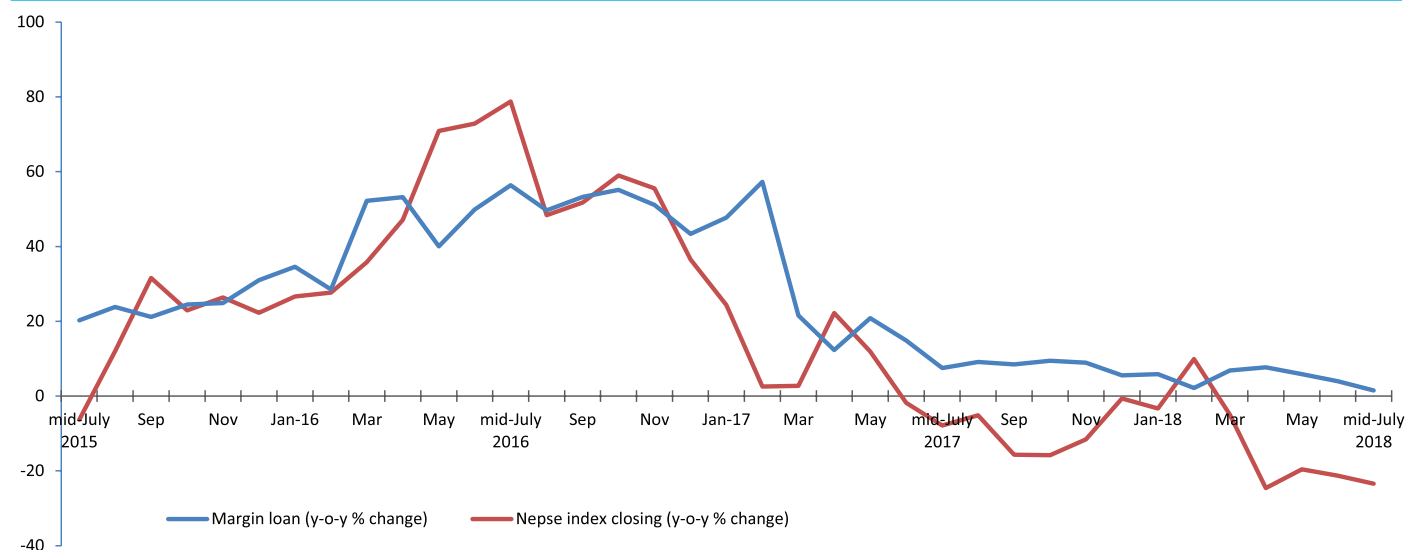
Figure 23 : Weighted average deposit and lending rates of commercial banks



Source: Nepal Rastra Bank

against the collateral of shares. Previously, the BFI could extend margin lending of up to 100.0% of core capital. The Monetary Policy for FY2019 has further reduced this limit to 25.0% of the core capital. A decline in margin lending reduces the availability of money to be invested in share market, decreasing the demand of shares and the NEPSE index. Second, the slow rise in remittance growth<sup>35</sup> in the fiscal year through mid-May 2018 decreased the availability of fund to be invested in share market. Third, higher interest rates on both deposit and credit may have depressed the share market.

Figure 24 : NEPSE index and margin loan



Source: Nepal Rastra Bank; Nepal Stock Exchange Ltd.

<sup>33</sup> It increased from 0.64% in mid-July 2017 to 2.96% in mid-July 2018

<sup>34</sup> Not only the stock prices of BFI that constitute 75.0% of the total listed companies in the stock market fell in FY2018, but those of manufacturing and processing industries, hydropower companies, hotels and trading institutions also fell in that fiscal year.

<sup>35</sup> Remittance inflows do follow seasonality. For instance, during biggest festive season such as Dashain that fall during the first quarter of the fiscal year, inflows normally surge.



## D. EXTERNAL SECTOR

### I. Exports

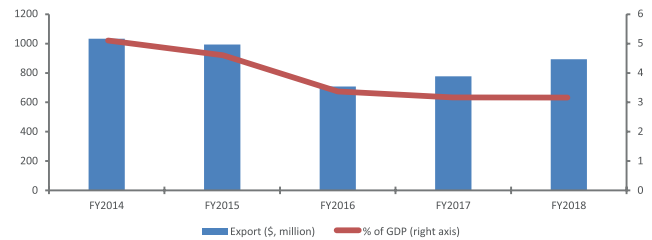
24. Merchandise exports increased by 15.8% to \$896.6 million in FY2018, higher than the growth of 12.1% a year earlier (Figure 25). Nepal's primary export items are: cardamom, juice, textiles, pashmina, woolen carpet and handicrafts. Exports of cardamom, cinnamon, ginger, polyester yarn, sackings, and zinc sheet, among others increased in FY2018. While there has been a growth in the registration of new manufacturing firms/industries in FY2018 (see table 3 above) with favorable socio-political environment, more needs to be done to boost the manufacturing sub-sector. For instance, better road connectivity, quickly availing electricity to newly established industries,<sup>36</sup> simplifying and speeding up duty rebate for export-oriented firms, simplifying the FDI regulations<sup>37</sup> and promotion of a competitive structure in key markets<sup>38</sup> are some of the major reforms to be initiated.

### II. Imports

25. Merchandise imports increased by 26.9% to \$11.8 billion in FY2018, albeit down from the growth of 37.1% a year earlier (Figure 26). Imports surged on the back of remittance income and higher domestic demand compounded by higher oil prices. Nepal's principal imports are: petroleum products, vehicles and spare parts, rice, electrical goods, machinery and parts and telecommunication equipment. Imports particularly of construction materials, vehicles and spare parts and petroleum products increased in FY2018.

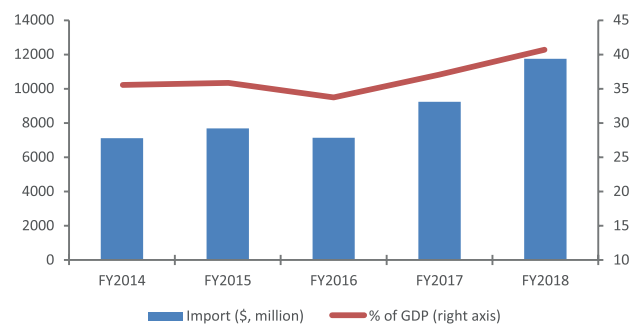
26. Merchandise trade deficit widened on higher import growth and weak export competitiveness. The trade deficit ballooned particularly with a rise in the import of construction materials such as cement, bitumen, billet, and capital goods like vehicles, machinery and parts. The trade deficit widened to \$10.9 billion, or 37.7% of GDP, in FY2018, up from \$8.5 billion a year earlier (Figure 27).

**Figure 25: Merchandise exports are steadily rising to pre-earthquake levels**



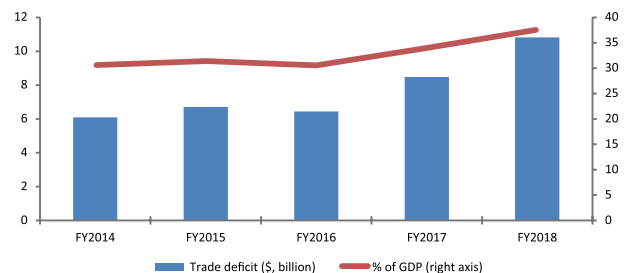
Source: Nepal Rastra Bank

**Figure 26: Merchandise imports are rapidly rising**



Source: Nepal Rastra Bank

**Figure 27: Merchandise trade deficit surged on higher import of capital goods**



Source: Nepal Rastra Bank

<sup>36</sup> Despite signing an agreement with the government, business firms delayed their construction of plants within Bhairahawa SEZ in the absence of dedicated electricity line. However, with the recent supply of electricity via 11kv transmission line, the business firms have begun constructing their plants.

<sup>37</sup> Foreign Investment Bill is yet to be ratified by the Parliament. An automatic approval route for FDI is crucial to curtail the FDI approval delays.

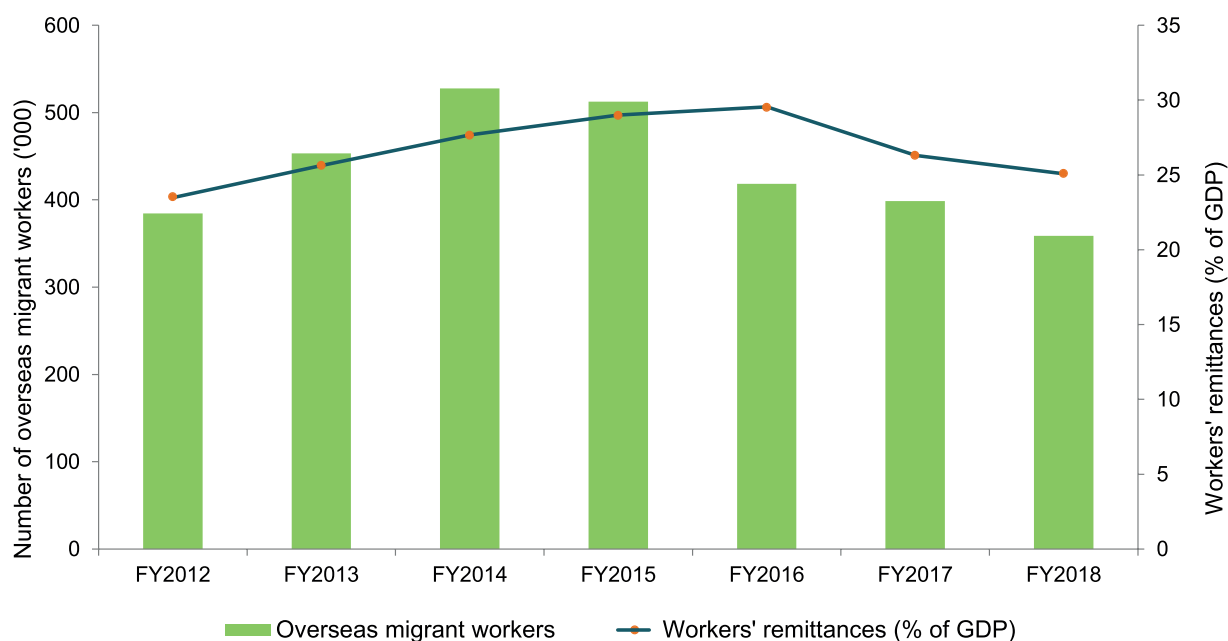
<sup>38</sup> Despite the prevalence of Competition Promotion and Market Protection Act 2007, syndicate is rampant in key sectors of the economy. The government eliminated the syndicate in transportation sector by opening route permits across the country and cancelling registration of transportation committees since FY2019. But, public is yet to experience the benefits of this outcome in terms of reduced transportation cost, better transportation vehicles and hassle-free transportation.



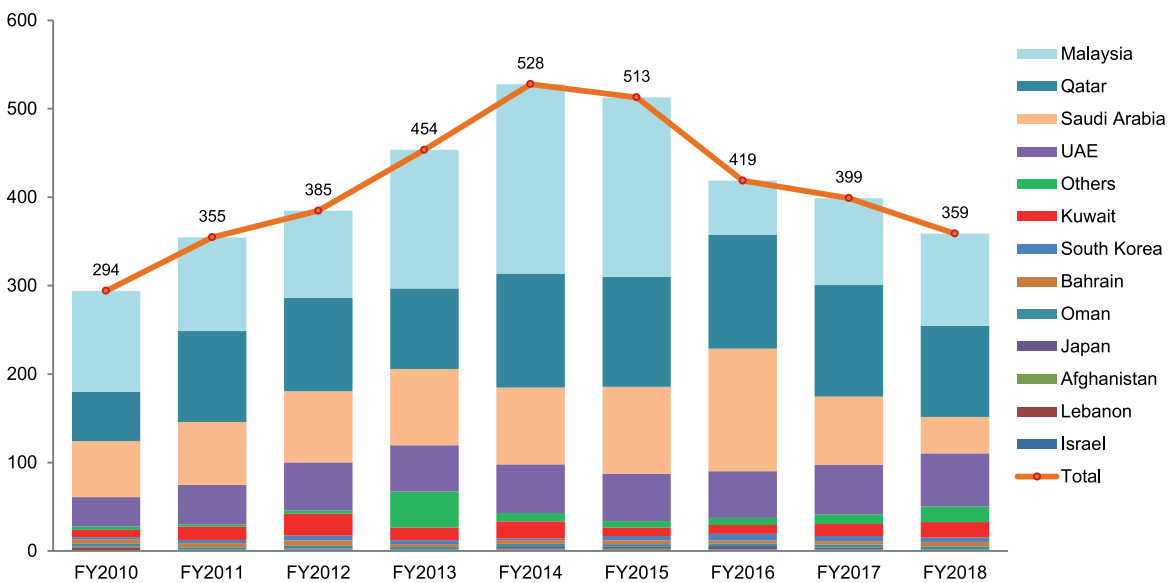
### III. Remittances

27. Despite a fall in the out-migration for foreign employment, the US dollar value of workers' remittances increased healthily in FY2018. Normally, migrant workers tend to remit more when Nepali rupee depreciates faster vis-à-vis the US dollar. The Nepali rupee has been depreciating rapidly since April 2018 against the US dollar. The other plausible reason for a healthy rise in remittance income is the government's control against hundi, an informal channel for income transfer. The workers' remittance increased by 10.5% to \$7.3 billion, or 25.1% of GDP, in FY2018, up from the growth of 4.7% a year earlier (Figure 28). Though the out-migration of workers particularly to Qatar and Saudi Arabia has declined, more Nepali workers are opting for other destination countries such as Kuwait and UAE (Figure 29).

**Figure 28: Overseas migrants and remittance inflows as share of GDP**



Source: Department of Foreign Employment; Nepal Rastra Bank

**Figure 29: Overseas migration excluding India (in thousands)**

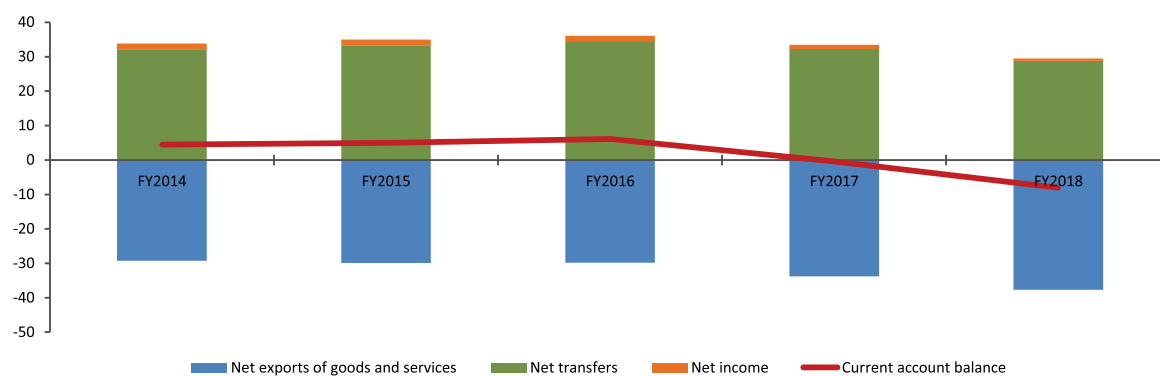
Source: Department of Foreign Employment.

#### IV. Balance of payments

28. External sector stability is vulnerable over the medium-term due to a rising trade deficit. Though remittance inflow has been growing healthily, a substantial increase in remittance income to control the ballooning current account deficit is unlikely in near future. This is mainly because most of the Nepali workers are in low-paying jobs and the out-migration for foreign employment is on a declining trend. On the other hand, rising trade deficit and falling net income are likely to further widen the current account deficit in coming years. The CA deficit of \$2.4 billion, or 8.2% of GDP, in FY2018 is significantly higher than the deficit of \$95.7 million, or 0.4% of GDP, a year earlier (Figure 30). The government aims to reduce the CA deficit over the medium-term via minimizing trade deficit through export promotion of competitive products and services, strengthening supply-side capacity and enhancing access of goods and services to foreign markets. FDI increased by 32.0% to \$168.3 million in FY2018, up from \$127.5 million a year earlier. Though foreign investment has risen in areas such as hydropower and cement, its share of GDP at 0.6% is dismal. Despite huge CA deficit, robust financial inflows<sup>39</sup> led to an overall balance of payments surplus of \$9.2 million in FY2018 vis-à-vis a surplus of \$775.2 million in FY2017. Gross foreign exchange reserves at \$10.1 billion in FY2018 is sufficient to cover imports of about 9.4 months of goods and services.

<sup>39</sup> Besides a rise in FDI, trade credits and loans also increased by 123.7% and 50.5%, respectively in FY2018

Figure30: Current account indicators (% of GDP)

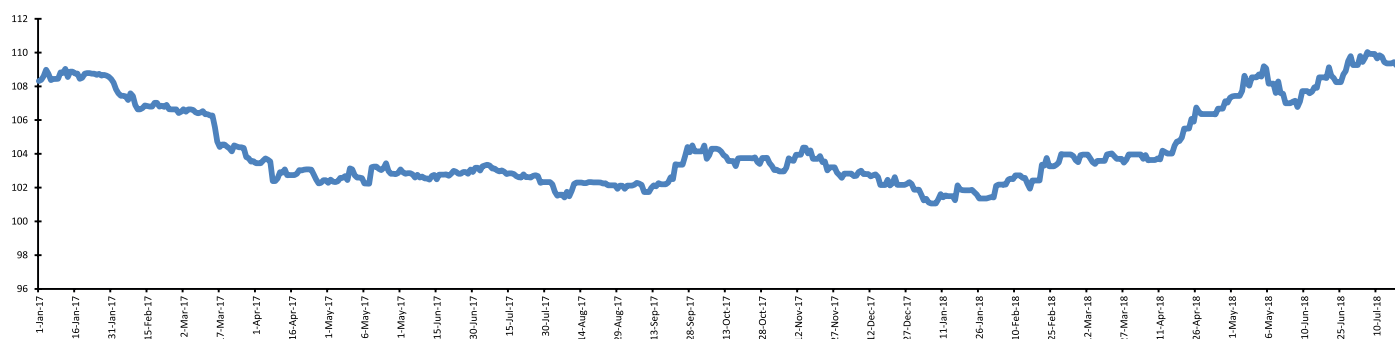


Source: Nepal Rastra Bank

## V. Exchange rate

29. Nominal exchange rate of Nepali rupee against the US dollar depreciated by 5.8% (y-o-y) in mid-July 2018 in line with the depreciation of Indian currency to which the Nepali currency is pegged (Figure 31). If this trend of depreciation of Nepali rupee vis-à-vis the US dollar continues, then it may potentially increase Nepal's external debt burden. Moreover, the induced demand for non-tradable goods and services fueled by remittance income has led to higher inflation in Nepal than in its trade partners. This effect has appreciated the real effective exchange rate, dampening Nepal's export competitiveness.

Figure31: Daily nominal exchange rate (NRs/\$)



Source: Nepal Rastra Bank



# ISSUE FOCUS

## Disaster risk reduction in Nepal<sup>1</sup>

### A. Introduction

Nepal is highly susceptible to natural hazards given its topography and diverse climatic conditions. The mountainous belt is at risk of landslide and soil erosion, the Himalayan belt is at risk of avalanche and glacial lake outburst flood, and the Terai belt is vulnerable to flood, drought and fire. The situation is further aggravated by unplanned human settlements. While Nepal suffers annually from monsoon floods and landslides, it is also highly exposed to hazards like earthquakes and epidemics (Table 1). Landslides and floods have become recurrent phenomena every monsoon resulting in a major loss of life and livelihoods across the country. The relatively young and emerging mountains of Nepal are prone to landslides in the event of sustained and torrential rainfall (Ministry of Home Affairs, 2017). Further, the unplanned settlements and encroachment along the river banks and floodplains have disrupted the natural course of rivers, inundating habitation. The unplanned land use patterns in the watersheds

**Table 1: Incidence of major disasters from 1971-2016**

Types	Incidence	Deaths	Missing	Injured	Houses damaged or destroyed	Families affected
Epidemic	3,452	16,583	-	43,111	-	512,989
Earthquake	175	9,771	-	29,142	982,855	890,995
Landslide	3,246	4,980	174	1,871	33,617	558,264
Flood	3,950	4,445	42	544	216,190	3,710,065
Fire	8,721	1,605	-	1,619	86,261	259,935
Cold wave	390	515	-	83	-	2,393
Snow storm	5	87	7	-	-	-
Avalanche	2	16	3	7	-	-
Wind storm	44	2	-	11	215	191
Hailstones/heavy rainfall	131	9	-	24	155	3,280
Others*	29	26	2	51	1	36

Note: \* Disasters such as high altitude, boat capsizing, snake bites and wild animal attack and others recorded since 2016 only.

Source: Adapted from Disaster Risk Management in Nepal: Status, Achievements, Challenges and Way Forward, Government of Nepal/Ministry of Home Affairs (2017).

<sup>1</sup> This section was written in collaboration with Naresh Giri, Senior Project Officer (Urban Development), NRM.

of hills and mountains have resulted in soil erosion. The situation in recent times has been further aggravated by overzealous practices of road construction in hills and mountains without realizing the fragility of local geology.

Situated near the boundary between the Indo-Australian Plate and the Tibetan Plateau on the Eurasian Plate, Nepal was ranked 11th most earthquake vulnerable country in the world (UNDP, 2009). Nepal was hit by major earthquakes in 1255, 1410, 1505, 1803, 1833, 1897, 1905, 1934 and 2015 (Ministry of Home Affairs, 2018). The 2015 earthquakes (25 April and 12 May) claimed nearly 9,000 lives, injured more than 22,000 people, inflicted damages and losses worth \$7 billion, and pushed 700,000–982,000 people below the national poverty line (National Planning Commission, 2015). Partly because of the 2015 earthquakes, GDP growth rate<sup>2</sup> dropped to 3.0% in FY2015 from 5.7% a year earlier.

Climate change has also intensified the incidence of natural catastrophe in Nepal. The rapid pace of urbanization and industrialization at the global scale have significantly warmed the earth's atmosphere over the past few decades. This global warming has affected the cropping seasons and receded the Himalayan glaciers (Chatterjee and Khadka (eds.), 2011). The glaciers in Nepal are retreating on an average rate of 38 square kilometers every year. The global warming has enhanced the risk of avalanche and glacial lake outburst flood, affecting the downstream communities (Bajracharya et al., 2014). The total glacier area and estimated ice reserves in Nepal have receded by 24.0% and 29.0%, respectively between 1977 and 2010 (Bajracharya et al., 2014). Given the backdrop, this paper discusses major issues and challenges to disaster risk reduction and highlights some of the key lessons on disaster management based on the Asian Development Bank's (ADB) experiences in Nepal.

## **B. Major issues and challenges to disaster management and risk reduction**

A series of issues persist on disaster management and risk reduction which, if addressed timely, can help mitigate disaster risk in Nepal. They are:

- a. **Low-level of awareness of disaster risk reduction and management:** Some of the pressing issues are: how can communities limit soil erosion and lessen the losses from landslides and floods? What interventions are needed to ensure that epidemics do not strike following floods? Research has shown that plantation of vegetation

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<sup>2</sup> At basic prices.

such as stylo (*Stylosanthes guianensis*), molasses (*Melinis minutiflora*) and amliso (*Thysanolaena maxima*) can help mitigate soil erosion (Kafle, 2005). A strict control on unplanned construction of embankments can lessen the devastation from floods. A major intervention is required to prevent misuse of dozers in the road construction in the hills and mountains. Sensitizing people about disasters can be helpful for disaster preparedness and mitigation.

- b. Lack of effective coordination on disaster risk management:** Disaster relief tends to be chaotic and haphazard in the absence of effective coordination mechanism. Further, siloed approaches are common in emergency management in Nepal. This was evident in the aftermath of earthquakes of 2015. There is thus an urgent need to establish an institutional framework that fosters a partnership between government, private sector, international/national non-governmental organizations, and donor communities for effective disaster management and risk reduction (Ministry of Home Affairs, 2017).
- c. Lack of disaster preparedness:** The earthquakes of 2015 exposed the inadequacy of Nepal's response and recovery to tackle mega disasters. As observed, the precautionary measures as part of pre-disaster preparedness was generally missing. Most of the houses that collapsed during the earthquake were built without following the Building Code and were highly vulnerable to seismic shaking. There appears a general inadequacy in the trainings on evacuation during events of fire and earthquake. More importantly, Nepal's capabilities to conduct search and rescue operations are constrained by limited high-tech equipment and specialized capacities (Ministry of Home Affairs, 2017).
- d. Lack of risk-informed approach:** There are not enough hydrological stations in the flood-source and the flood-prone areas of Nepal. Even if available, many of them are not functional due to institutional deficiencies. If the institutional deficiencies are addressed, the loss of life and livelihoods can be significantly lessened. Lately, with the increased penetration of mobile phones, SMS alerts, as part of the early warning system, are sent to people with mobile phones on flood, fire and other natural disasters in Nepal. However, investments are needed to enhance the early warning system, improve technical skills and capacities for risk-informed approach, hazard, and risk mapping and upgrading the disaster management information system (Ministry of Home Affairs, 2017).

**e. Slow reconstruction, rehabilitation and resettlement process:**

The slow pace of reconstruction, rehabilitation and resettlement is evident with significant part of the post-earthquake reconstruction work pending even after three years. The resettlement is another pressing issue as human casualty tend to increase with poor, disadvantaged and marginalized communities residing in disaster-prone areas. For instance, poor communities live in marginalized land, such as the floodplains and landslide-prone terrain in the remote mountains where swift relief is hard to deliver. To expedite the rehabilitation work, the National Reconstruction Authority has endorsed five preliminary plans for integrated housing development in *Sindhupalchowk*, *Ramechhap* and *Kavrepalanchowk* districts recently (National Reconstruction Authority, 2018).

**f. Mainstreaming disaster management and risk reduction approach into development planning:**

Though this process has gained momentum, lack of technical skills and strong will to adopt risk-informed and evidence-based development planning have hindered the initiative (Ministry of Home Affairs, 2017).

**g. Inadequate disaster risk financing:**

Investment in disaster risk reduction (DRR) has been limited which has hindered DRR activities in Nepal. The DRR funding in Nepal generally comes from development partners after disasters strike, as in the international conference for national reconstruction organized after the 2015 earthquakes.

## **C. Disaster risk reduction plans/programs and policies**

Nepal is committed to effective disaster management and risk reduction in accordance with internationally accepted treaties, norms and practices. The Constitution of Nepal has outlined the roles and responsibilities toward disaster risk mitigation for all the three tiers of governments. The National Disaster Risk Reduction Policy 2018 and National Disaster Risk Reduction Strategic Action Plan 2018-2030 aim at mitigating disasters and minimizing casualties via (a) raising the level of awareness on disaster risk among all sections and layers of population; (b) integrating disaster risk mitigation with climate change adaptation activities; (c) promoting public and private investments for mitigating disaster risk; (d) strengthening risk management information system and developing multi-hazard early warning system; and (e)



promoting ‘build back better’ concept in recovery, rehabilitation and reconstruction initiatives (Ministry of Home Affairs, 2018).

The recently promulgated Disaster Risk Reduction and Management Act 2017<sup>3</sup> proposes establishing a National Council for Disaster Risk Reduction and Management under the chairmanship of Prime Minister for effective disaster risk management and mitigation. The council will approve national policy and plans related to risk management, provide directives and policy guidelines to sub-national levels, and evaluate disaster management related activities, among others. The council envisages establishing an executive committee to draft national policy and plan related to disaster management, determine roles and responsibilities of government and non-government disaster risk management (DRM) stakeholders, enhance institutional capacity on disaster management at provincial, local and district levels, among others. The Act also envisions creating a National Disaster Risk Reduction and Management Authority for effective implementation of disaster management activities. The Act has the provision of creating a multi-tier institutional structure of disaster risk reduction and management at sub-national levels (Nepal Law Commission, 2017).

## D. Lessons based on ADB experiences

- a. **Multi-stakeholder approach:** The multi-stakeholder approach basically implies the involvement of donors, municipalities, school management committee (for school rehabilitation and reconstruction) and other relevant stakeholders in disaster risk management projects. ADB has assisted in principal by building/strengthening institutional capacities to ensure the resilience of infrastructure projects and applied risk-screening tools in designing projects. ADB’s DRM approach has been primarily based on education (school buildings) and water (flood risk management infrastructure) sectors. For instance, ADB assisted ‘School Sector Development Program’<sup>4</sup> entailed that all the newly built schools and classrooms comply with disaster risk resilience standards. Likewise, ADB supported ‘Third Small Towns Water Supply and Sanitation Sector 2014- Project’, necessitated preparation of drainage master plans and building drainage system in the towns prone to flood. A project in the pipeline, ‘Disaster Resilience of Public School Infrastructure and Communities Project’ will pilot a community-based retrofitting and disaster risk reduction education program in six selected municipalities. From these initiatives, ADB

<sup>3</sup> This Act repeals and replaces the Natural Calamity Relief Act 1982.

<sup>4</sup> This program is being financed by ADB along with eight other joint financing partners for FY2017-FY2021.

finds the importance of multi-stakeholder approach on disaster risk management to be crucial for the following reasons:

- i. increasing disaster and climate risk awareness
  - ii. communicating DRM issues more effectively in a challenging political and institutional environment
  - iii. prioritizing capacity development because of weak institutional capacity on DRM
  - iv. ensuring effective coordination mechanism especially with DRM champions and technical experts
- b. Effective donor coordination:** ADB has been a donor lead of the school safety under the flagship area 1 of Nepal Risk Reduction Consortium.<sup>5</sup> The World Health Organization leads the hospital safety under the flagship area 1 of this consortium. There are five flagship areas in disaster risk management led by development partners in coordination with the relevant government ministries. Effective donor coordination has been beneficial in achieving the outcomes of the flagship programs. Further, the outputs and knowledge emanating out of school DRM has been useful for other donors in their implementation of disaster risk management and vice-versa. For instance, the masons trained under flagship area 1 have been useful in community-based DRM under flagship area 4.
- c. Bundling of soft assistance with physical investments:** Based on ADB experiences, the bundling of soft assistance with physical investments has proven more effective. For instance, in the Earthquake Emergency Assistance Project supported by ADB, support for capacity development, institutional development and technical knowhow on energy efficient technologies are inbuilt. This promotes the sustainability of donor assisted disaster risk management projects.

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<sup>5</sup> The consortium is chaired by the Secretary of the Ministry of Home Affairs.

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## Appendix 1: Country Economic Indicators

Item	Fiscal Year				
	2014	2015	2016	2017	2018R
<b>A. Income and Growth</b>					
1. GDP per Capita (\$, current)	725.5	765.9	747.3	865.6	988.9 <sup>a</sup>
2. GDP Growth (% , in basic prices)	5.7	3.0	0.2	7.4	5.9 <sup>a</sup>
a. Agriculture	4.5	1.1	0.2	5.2	2.8 <sup>a</sup>
b. Industry	7.1	1.4	(6.4)	12.4	8.8 <sup>a</sup>
c. Services	6.2	4.6	2.4	7.4	6.6 <sup>a</sup>
<b>B. Saving and Investment (current and market prices, % of GDP)</b>					
1. Gross Domestic Investment <sup>b</sup>	23.5	28.0	28.7	31.8	34.1
2. Gross National Saving	45.7	44.1	40.1	45.4	43.9
<b>C. Money and Inflation</b>					
1. Consumer Price Index ( average annual % change)	9.1	7.2	9.9	4.5	4.2 <sup>c</sup>
2. Total Liquidity (M2) (annual % change)	19.1	19.9	19.5	15.5	19.4 <sup>c</sup>
<b>D. Government Finance (% of GDP)</b>					
1. Revenue and Grants	20.6	20.8	23.1	24.3	25.4 <sup>d</sup>
2. Expenditure and Onlending	20.0	21.8	23.6	29.3	34.0 <sup>d</sup>
3. Overall Fiscal Surplus (Deficit) <sup>e</sup>	1.8	0.8	1.3	(3.2)	(6.7) <sup>d</sup>
<b>E. Balance of Payments</b>					
1. Merchandise Trade Balance (% of GDP)	(30.3)	(31.1)	(30.3)	(33.9)	(37.7) <sup>c</sup>
2. Current Account Balance (% of GDP)	4.6	5.1	6.2	(0.4)	(8.2) <sup>c</sup>
3. Merchandise Export (\$) Growth (annual % change)	5.1	(3.9)	(28.8)	12.1	15.8 <sup>c</sup>
4. Merchandise Import (\$) Growth (annual % change)	13.9	8.0	(7.1)	37.1	26.9 <sup>c</sup>
5. Remittances (% of GDP)	27.7	29.0	29.5	26.3	25.1 <sup>c</sup>
<b>F. External Payments Indicators</b>					
1. Gross Official Reserves (\$ million)	6,938.6	8,147.7	9,736.4	10,494.2	10,084.0 <sup>c</sup>
Months of current year's imports of goods)	10.0	11.2	14.1	11.4	9.4 <sup>c</sup>
2. External Debt Service (% of exports of goods and services)	8.9	8.1	9.9	10.8	5.0 <sup>f</sup>
3. Total External Debt (% of GDP)	17.7	16.1	17.3	15.7	15.5 <sup>f</sup>
<b>G. Memorandum Items</b>					
1. GDP (current prices, NPR billion)	1,964.5	2,130.2	2,253.2	2,642.6	3,007.2 <sup>a</sup>
2. Exchange Rate (NPR/\$, average)	98.0	99.2	106.1	105.9	104.1 <sup>c</sup>
3. Population (million)	27.6	28.0	28.4	28.8	29.2

GDP = gross domestic product; R = revised;  
 Note: FY2018 covers 16 July 2017 to 15 July 2018.

<sup>a</sup> Based on FY2018 National Accounts Statistics. Central Bureau of Statistics

<sup>b</sup> Refers to gross fixed investment and does not include change in stocks

<sup>c</sup> Based on FY2018 annual data. Nepal Rastra Bank

<sup>d</sup> Based on FY2019 Budget Speech and FCGO's revised data

<sup>e</sup> Revenue and Grants minus Expenditure

<sup>f</sup> Based on FY2018 nine months data. Financial Comptroller General Office

Sources: Ministry of Finance. FY2019 Budget Speech. Kathmandu; Nepal Rastra Bank. 2018. Macroeconomic Situation. Kathmandu; Central Bureau of Statistics. April 2018. FY2018 National Accounts Statistics. Kathmandu; Central Bureau of Statistics. 2014. National Population and Housing Census 2011 (Population Projection 2011 - 2031). Kathmandu; Financial Comptroller General Office.

## Appendix 2: Country Poverty and Social Indicators

Item	Period					
	1990s		2000s		Latest Year	
<b>A. POPULATION INDICATORS</b>						
1. Population (million)	18.5	(1991)	23.2	(2001)	28.4	(2016)
2. Population growth (annual % change)	2.1		2.2		1.4	(2016)
<b>B. Social Indicators</b>						
1. Fertility rate (births/woman)	5.1	(1996)	3.6	(2004)	2.3	(2016)
2. Maternal mortality ratio (per 100,000 live births)	539.0	(1996)	281	(2006)	239.0	(2016)
3. Infant mortality rate (below 1 year/1,000 live births)	82.0	(1991)	48.0	(2006)	32.0	(2016)
4. Life expectancy at birth (years)	55.0	(1991)	62.0	(2001)	70.0	(2015)
a. Female	54.0	(1991)	63.0	(2001)	71.0	(2015)
b. Male	55.0	(1991)	62.0	(2001)	68.0	(2015)
5. Adult literacy (%)	35.6	(1996)	48.0	(2004)	64.0	(2016)
a. Female	19.4	(1996)	33.8	(2004)	54.2	(2016)
b. Male	53.5	(1996)	64.5	(2004)	75.3	(2016)
6. Primary school gross enrollment (%)	57.0	(1996)	72.0	(2004)	133.6	(2016)
7. Secondary school gross enrollment (%)	43.8	(2001)	54.4	(2004)	79.0	(2016)
8. Child malnutrition (% below 5 years old)	57.0				36.0	(2016)
9. Population below poverty line (international, %)	68.0	(1996)	53.1	(2003)	24.82	(2011)
10. Population with access to safe water (%)	45.9		82.5	(2006)	95.0	(2016)
11. Population with access to sanitation (%)	22.0	(1995)	24.5	(2006)	62.0	(2016)
12. Public education expenditure (% of GDP)	2.0		2.9	(2005)	4.4	(2016)
13. Human development index	0.341		0.429	(2005)	0.558	(2015)
14. Rank/total number of countries	152/173		136/177	(2003)	144/188	(2015)
15. Gender-related development index	0.33	(1995)	0.511	(2003)	0.925	(2015)
16. Rank/total number of countries	148/163	(1995)	106/140	(2003)	144/188	(2015)
<b>C. Poverty Indicators</b>						
1. Poverty incidence	42	(1996)	31	(2004)	25.16	(2011)
2. Proportion of poor to total population						
a. Urban	23.0	(1996)	9.55	(2004)	15.46	(2011)
b. Rural	44.0	(1996)	34.62	(2004)	27.43	(2011)
c. Mountain	57.0	(1996)	32.6	(2004)	42.77	(2011)
d. Hills	40.7	(1996)	34.5	(2004)	24.32	(2011)
e. Terai	40.3	(1996)	27.6	(2004)	23.44	(2011)
3. Poverty gap	11.75	(1996)	7.55	(2004)	5.43	(2011)
4. Poverty severity index	4.67	(1996)	2.7	(2004)	1.81	(2011)
5. Inequality (Theil Index)	...		...		...	
6. Multidimensional poverty index <sup>1</sup>	...		...		0.116	(2015)

... = not available, GDP = gross domestic product,

Sources: Central Bureau of Statistics. 2012. National Population and Housing Census 2011. Kathmandu; Central Bureau of Statistics. 2014. National Population and Housing Census 2011 (Population Projection 2011-2031). Kathmandu; Central Bureau of Statistics. 2016. Annual Household Survey 2015/16. Kathmandu; Ministry of Health. 2017. Nepal Demographic and Health Survey 2016. Kathmandu; United Nations Development Programme. 2017. Human Development Report 2016. New York; Central Bureau of Statistics. 2011. Poverty in Nepal (2010/11). Kathmandu; Ministry of Finance. 2016. Budget Speech of FY2016/17. Kathmandu; World Bank. World Development Indicators database. <https://data.worldbank.org/> (accessed 13 February 2018).

<sup>1</sup> UNDP replaced Human Poverty Index with Multidimensional Poverty Index from Human Development Report 2011.



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