AMRO Annual Consultation Report

Vietnam - 2017

The ASEAN+3 Macroeconomic Research Office (AMRO)

April 2018

Acknowledgements

1. This Annual Consultation Report on Vietnam – 2017 has been prepared in accordance with the functions of AMRO to monitor, assess and report its members' macroeconomic status and financial soundness and to identify the relevant risks and vulnerabilities, and assist them in the timely formulation of policy recommendation to mitigate such risks (Article 3(a) and (b) of AMRO Agreement).

2. This Report is drafted on the basis of the Annual Consultation Visit of AMRO to Vietnam from 28 September to 4 October 2017 (Article 5 (b) of AMRO Agreement). The AMRO Mission team was headed by Dr Seung Hyun (Luke) Hong, Group Head and Lead Specialist. Members include Dr Cuc Thi Kim Nguyen, Senior Economist in charge of Vietnam; Dr Jinho Choi, Specialist and Back-up Economist for Vietnam; Ms Siti Athirah Ali, Economist; Mr Oudom Cheng, Associate and Mr Kazuo Kobayashi, Technical Assistance Specialist. AMRO Chief Economist Dr Hoe Ee Khor and Deputy Director (CMIM, Strategy, and Coordination) Mr Yasuto Watanabe also participated in the Mission. Ms Ha Thanh Truong, AMRO Associate, provided assistance for the preparation of this report. The report was approved by Dr Hoe Ee Khor, AMRO Chief Economist.

3. The analysis in this Report is based on information available up to 31 December 2017.

4. By making any designation of or reference to a particular territory or geographical area, or by using the term "member" or "country" in this Report, AMRO does not intend to make any judgements as to the legal or other status of any territory or area.

5. No part of this material may be disclosed unless so approved under the AMRO Agreement.

6. On behalf of AMRO, the Mission team wishes to thank the Vietnamese authorities for their comments on this Report, as well as their excellent meeting arrangements and hospitality during our visit.

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Executive Summary

In the AMRO annual consultation report on Vietnam (2016), AMRO staff were of the view that despite some growth moderation in 2016, the economy of Vietnam had stayed resilient amid negative shocks. Fiscal policy space, meanwhile, continued to narrow in tandem with rising debt, and the banking sector remained vulnerable. In the staff's assessment, policy adjustments, including greater flexibility in exchange rate management and the adoption of a medium-term fiscal consolidation plan, were in the right direction, and should be continued. In the past year, Vietnam's economic growth has rebounded strongly with short-term outlook remaining positive, aided by improved global prospects and strengthened domestic demand. The external position has continued to improve, benefiting from strong exports and increased foreign investment, while ongoing consolidation efforts have also led to lower fiscal deficits and debt levels. In light of the recent strong growth momentum, AMRO encourages the authorities to further strengthen their policy focus on financial stability and fiscal sustainability. Ongoing efforts to expedite the non-performing loan resolution and bank recapitalization, including the recent endorsement of a pilot NPL resolution scheme, are welcome. Policy adjustments to tackle medium- to long-term challenges arising from climate and demographic changes, as well as the relative inefficiency of the domestic sector, including state-owned enterprises, are also recommended.

Recent Developments and Outlook

Economic growth has rebounded in 2017, supported by strong manufacturing exports and strengthened domestic demand, as well as a recovery in agricultural output. Real GDP growth slowed in 2016 to 6.2 percent, as agricultural production was adversely affected by a prolonged drought and increased saltwater intrusion, while mining and quarrying output contracted. The slowdown continued into early 2017 but economic activity has since rebounded strongly, driving real GDP growth to 6.8 percent in 2017. The recent acceleration in growth momentum was driven by increased domestic consumption and investment, and strong exports. Short-term outlook remains positive, with real GDP projected to grow robustly at 6.6 percent in 2018.

Despite a pick-up in headline inflation, underlying inflationary pressure remains subdued. Headline CPI averaged 3.5 percent in 2017, up from 2.7 percent a year earlier, driven by higher fuel prices and planned increases in state-administered prices. However, underlying inflationary pressure was more subdued, with core CPI averaging 1.4 percent in 2017, down from 1.8 percent a year earlier. It is projected that headline CPI will increase moderately but remain contained below 4 percent in 2017 and 2018, in line with the government's target.

The external position has continued to improve, benefiting from strong export performance and increased foreign investment. The current account balance is projected to remain in a surplus of about 3.1 percent of GDP in 2017, after a 4.2 percent surplus in 2016. Increased foreign investment inflows, meanwhile, are expected to raise the financial and capital account surplus to about 7.2 percent of GDP in 2017. The Vietnamese *dong* has been relatively stable recently, following bouts of depreciation in the aftermath of the U.S. election at end-2016 and around the Fed rate hikes in December and March. Against these backdrops, gross international reserves are projected to increase from about USD36.7 billion, as of end-2016, to around USD51.5 billion at end-2017, which will be sufficient to cover about 2.8 months of imports of goods and services.

Credit growth has been buoyant and highly supportive of economic activity. Domestic credit grew at about 19.1 percent, as of November 2017, compared to the target of 18 percent. While bank lending to real estate has slowed, likely in response to a higher regulatory risk weight applicable to real estate loans since early 2017, bank lending to construction activities have expanded more rapidly. Growth in broad money has moderated, but liquidity conditions remain ample with interbank rates declining recently. The State Bank of Vietnam (SBV) lowered its policy rates by 25 basis points in July 2017 to support business activity.

A number of institutional changes were initiated recently to speed up the banking sector reform process, including the endorsement of a pilot NPL resolution scheme and a restructuring plan for credit institutions for 2016-2020. Banks, meanwhile, remain fragile with relatively low capital adequacy ratios and still-sizeable NPLs.

Fiscal developments in 2017 suggest continued improvements from consolidation efforts. Fiscal position improved in 2016 on the back of an increase in land-based revenue and SOE equitization proceeds. Revenue collection in 2017 exceeded the budget plan, aided by buoyant tax revenue and continued strong land-based revenue. Budget expenditure moderated as current spending normalized from a high base in 2016, while capital spending increased in 2017. As such, the overall fiscal deficit moderated from 5.6 percent of GDP in 2016 to about 3.5 percent in 2017, in line with the authorities' target. A number of structural measures to enhance tax revenue have been proposed by the Ministry of Finance of Vietnam, as part of the implementation of the recently endorsed Five-Year Fiscal Plan and Medium-Term Public Investment Plan for 2016-2020. On the back of improved fiscal position, public debt is estimated to moderate to about 61.4 percent of GDP in 2017, after peaking at 63.6 percent in 2016.

Risks and Vulnerabilities

While short-term growth outlook remains positive, downside risks stem from both adverse external shocks and domestic weaknesses. Policy surprises of the Fed and ECB, and the U.S. administration, could lead to greater volatility in asset prices and capital outflows from emerging and frontier markets, including Vietnam. Imposition of protectionist measures by the U.S. and other major trading partners, leading to weaker-than-expected global demand may adversely affect Vietnam via trade channels. On the domestic front, faster credit growth may undermine the progress made in improving the still-fragile banking system by creating new NPLs and weakening banks' capital buffers. **Medium to long-term challenges could arise from climate change, Vietnam's rapidly aging population, and relative inefficiency of domestic firms, including SOEs.**

Policy Discussion

In light of strong growth performance in 2017, it is recommended that policy focus on financial soundness and fiscal sustainability be strengthened. With credit growth exceeding 18 percent for the last two years and the credit to GDP ratio rising to above 120 percent of GDP - a relatively high level compared to regional peers, a further boost to domestic credit may lead to imprudent lending with adverse effects on financial soundness of the banking system. Recent efforts to expedite NPL resolution and bank recapitalization should be enhanced. AMRO supports the medium-term fiscal consolidation plans and encourages the authorities to continue their revenue enhancing efforts while giving priority to expenditure adjustments which are growth promoting and efficiency enhancing. As Vietnam's FX reserves in terms of import cover remain low, it is recommended that the SBV continue to build up its reserve buffer over time. Policy adjustments to tackle medium- to long-term challenges arising from climate and demographic changes should be well designed and implemented with concerted efforts from relevant State agencies. Last, but not least, reform measures to enhance long-term growth potential, including SOE reform, are essential.

A. Recent Developments and Outlook

A.1 Real Sector

1. **Economic growth has rebounded to 6.8 percent in 2017, supported by strong manufacturing and services, as well as a recovery in agricultural output**. From the production side, real GDP growth slowed in 2016 to 6.2 percent, as agricultural production was adversely affected by a prolonged drought and increased saltwater intrusion, while mining and quarrying output contracted (Table 1). The slowdown continued into the first quarter of 2017 but economic activity rebounded strongly in the subsequent quarters, driven by export-led manufacturing and a broad-based increase across various services subsectors. As such, real GDP growth picked up to 6.8 percent in 2017.

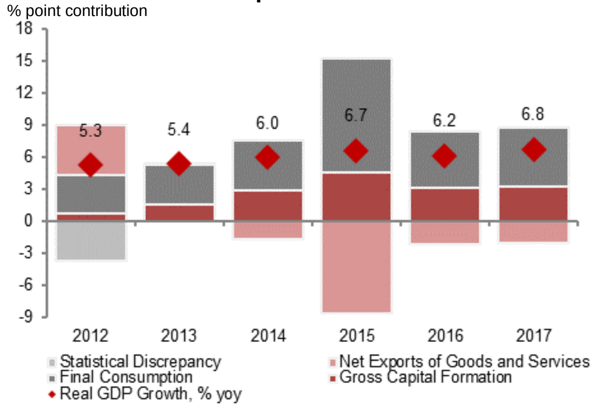
Table 1. Vietnam's real GDP growth by sector

Annual change, % year-on-year	2013	2014	2015	2016	2017
Real GDP growth	5.4	6.0	6.7	6.2	6.8
Agricultural, Fishery, and Forestry (14.8% of total GDP in 2017)	2.6	3.4	2.4	1.4	2.9
Industry (28.7%)	5.4	7.2	9.4	7.1	7.8
Mining and quarrying (6.6%)	-0.2	2.4	6.5	-4.0	-7.1
Manufacturing (17.4%)	7.4	8.5	10.6	11.9	14.4
Electricity and Gas (4.1%)	8.5	12.1	11.4	11.6	9.4
Water supply and sewage management (0.6%)	9.1	6.4	7.4	7.8	8.7
Construction (6.3%)	5.8	7.1	10.8	10.0	8.7
Services (38.8%)	6.6	6.0	6.3	7.0	7.4

Note: Data in bracket are sectoral shares in total GDP in 2017.
Sources: General Statistics Office of Vietnam (GSO), CEIC, and AMRO Staff Calculations

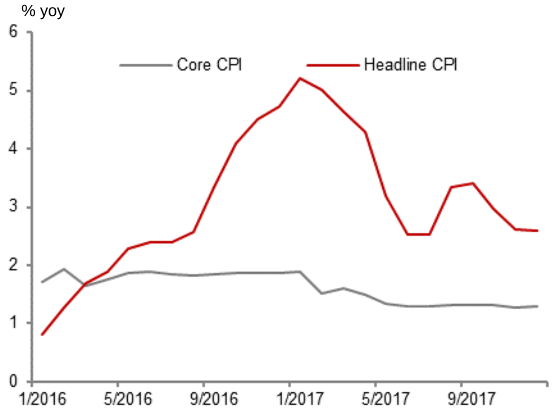
2. **The recent acceleration in growth momentum was driven by strengthened domestic demand and strong exports.** Domestic demand has picked up substantially, supported by stronger final consumption and investment (Figure 1). Exports have rebounded since Q2, lending support to overall growth. As imports also rebounded, driven by FDI-related imports of capital goods, net exports of goods and services made a negative contribution to growth. Growth outlook has been positive, with economic growth projected to remain robust at 6.6 percent in 2018, with the continued support of domestic demand and exports.

Figure 1. Contribution to Real GDP Growth: from the Expenditure Side



Sources: General Statistics Office (GSO), CEIC

Figure 2. CPI Inflation



Sources: General Statistics Office (GSO), CEIC

3. **Despite a pick-up in headline inflation, underlying inflationary pressure remains subdued.** Headline CPI averaged 3.5 percent year-on-year in 2017, up from 2.7 percent a year earlier. The pick-up in headline CPI inflation was driven by higher fuel prices and increases in State administered prices[1], which was partly offset by lower food inflation, in particular pork prices. Underlying inflationary pressure has been weak, with core CPI inflation averaging 1.4 percent in 2017, down from 1.8 percent a year earlier (Figure 2). It is projected that headline CPI will remain within the government target of around 4 percent in 2018.

A.2 External Sector

4. **Trade balance has improved recently, led by a strong rebound in export growth**. A surge in Information Technology and Communication (ITC) exports, mainly mobile phones, computers, and components in tandem with the release of new Samsung mobile phone models and a strong semiconductor demand globally has lifted export growth significantly since Q2 2017. Continued expansion in exports of clothing and footwear, and a renewed increase in agricultural and seafood exports have also supported overall exports, which grew at about 21.1 percent (year-on-year) in value terms and about 17.6 percent in volume terms in 2017. While the U.S. and E.U. remain the largest importers of Vietnamese goods and products, export growth to regional markets, in particular China and Korea, have been rising rapidly. Growth in imports slowed somewhat in the second half of 2017, but remains elevated, driven mainly by FDI firms' imports of capital and intermediate goods. As such, imports increased 21.3 percent and 18.2 percent (year-on-year) in value and volume terms, respectively, in 2017. Trade balance has improved since Q2 2017, on the back of rebounding exports. Trade surplus (BOP basis) hence remained hefty at about USD11.3 billion in 2017, compared with about USD14 billion in 2016.

5. **Foreign investment inflows increased significantly in 2017, driven by strong foreign direct investment and a surge in merger and acquisition transactions.** Foreign direct investment (FDI) commitment and disbursement increased to USD29.7 billion and USD17.5 billion, respectively, in 2017, up by 44.2 percent and 10.8 percent from a year earlier. Foreign investment inflows via merger and acquisition (M&A) transactions (mainly share acquisitions) have risen sharply since 2016, with about USD6.2 billion being committed in 2017.[2] FDI data indicate continued inflows to manufacturing and processing activities, and more recently, power generation/energy sector; M&A transaction data, meanwhile, suggest

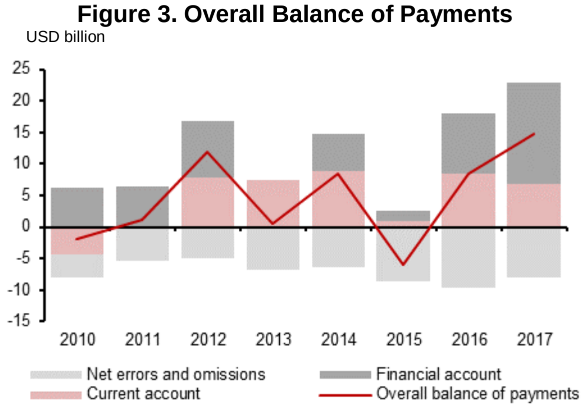
[1] The authorities have increased the state-administered prices for healthcare and education since 2016, as part of their roadmap to reduce the budget subsidies for these sectors (in accordance with Inter-Ministerial Circular 37/2015/TTLT-BYT-BTC dated October 2015 jointly issued by Ministry of Health and Ministry of Finance, effective March 2016; and Governmental Decree 86 dated October 2015 on the school fee system and government subsidies for school fees from 2016 to 2021. The implementation of fee hikes has been conducted in phases since March 2016.

[2] For example, Thai group Singha in early 2017 bought 25 percent and 33 percent stake in Masan Consumer Holdings and Masan Brewery respectively at a total of USD1.1 billion. Back in 2016, Fraser & Neave, a Singaporean beverage company, bought 5.4 percent of Vinamilk's shares at USD500 million, and Central Group, a Thai company, acquired Big C Vietnam for VND1.14 billion. Last but not least, Thai Beverage acquired a USD4.8 billion stake in Saigon Alcohol Beer and Beverages Corporation (Sabeco) in December 2017.

foreign investors have been increasingly interested in domestic market-oriented sectors such as real estate, consumer goods, retail, and insurance, which are poised to benefit from a fast-rising middle class in Vietnam. Korea and Japan remain the largest FDI investors in Vietnam, whereas firms from neighboring ASEAN, such as Singapore and Thailand, have been relatively active in M&A transactions. Both stock exchange and EPFR data suggest that portfolio inflows to Vietnam have also increased, with foreign investors net-purchasing Vietnamese bonds and equities since early this year.

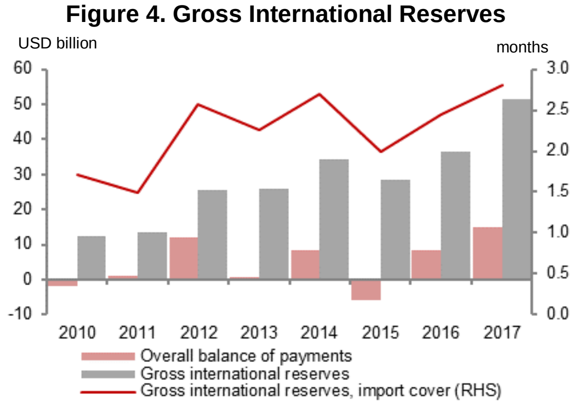
6. **The external position has continued to improve, benefiting from strengthened export performance and increased foreign investment.** Recently improved trade balance, driven by stronger exports, coupled with resilient overseas remittances, has reversed the current account from a deficit in Q1 2017 into surpluses in subsequent quarters. The current account balance is hence projected to sustain a surplus of about 3.1 percent of GDP in 2017, albeit moderating from 4.2 percent of GDP in 2016. Increased foreign investment inflows, meanwhile, drove the financial and capital account surplus to 7.2 percent of GDP in 2017 (Figure 3). The Vietnamese *dong* has been relatively stable recently, following bouts of depreciation in the aftermath of the U.S. election in November and around the Fed rate hikes in December and March. Against these backdrops, gross international reserves are projected to increase from about USD36.7 billion, as of end-2016, to around USD51.5 billion at end-2017, which will be sufficient to cover about 2.8 months of imports of goods and services (Figure 4).

Figure 3. Overall Balance of Payments



Note: Data for 2017 are AMRO staff projections.
Sources: SBV, IMF, CEIC and AMRO Staff Calculations

Figure 4. Gross International Reserves



Note: Data for 2017 are AMRO staff projections.
Sources: SBV, IMF, CEIC and AMRO Staff Calculations

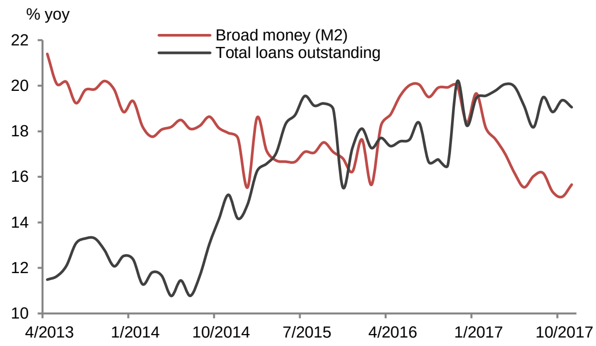
7. **Vietnam's external debt has risen in recent years, but remains manageable with the majority of borrowings being medium- to long-term, and concessional.** As of end-2017, Vietnam's national external debt level is estimated to be about 49 percent of GDP, up from 44.8 percent in 2016. While public and publicly guaranteed external debt moderated slightly from 26.7 percent of GDP in 2016 to 25.8 percent in 2017, external borrowing by the private sector has risen from 18.1 percent of GDP in 2016 to 23.1 percent of GDP in 2017. As

far as debt profile is concerned, about 80 percent of total external debt outstanding is medium- to long-term borrowings, the majority of which are under concessional terms. AMRO's external debt sustainability analysis on Vietnam for the next five years suggests that external debt may continue to rise in the medium-term, driven by higher external gross financing needs, but remain contained within the threshold of 50 percent of GDP by 2020, as laid out in the Five-Year Fiscal Plan for 2016-2020 (Appendix 3). Debt levels, however, are found to be most vulnerable to current account and currency depreciation shocks.

A.3 Monetary Sector and Financial Markets

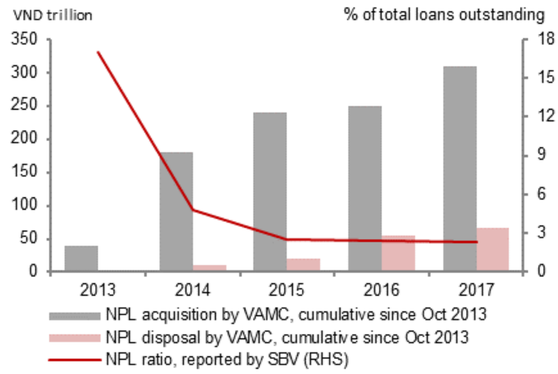
8. **Credit growth has been buoyant and highly supportive of economic activity.** Domestic credit grew by 19.1 percent, as at November 2017, compared to the target of 18 percent.[3] While bank lending to the real estate has slowed, likely in response to a higher regulatory risk weight applicable to real estate loans from January 2017[4], bank lending to construction activity expanded rapidly at 30.5 percent, as at November 2017. Growth in broad money has moderated since Q2 2017, but liquidity conditions remain ample with interbank rates declining recently (Figure 5). The State Bank of Vietnam (SBV) in July 2017 lowered its policy rates by 25 basis points to support economic growth and business activity.

Figure 5. Monetary Conditions and Credit Growth



Sources: SBV, CEIC and AMRO Staff Calculations

Figure 6. Non-Performing Loans



Sources: SBV, VAMC, and AMRO Staff Calculations

[3] According to SBV Governor's Directive 01 dated 10 January 2017, monetary policies would be implemented in a flexible and pro-active manner in 2017 to control inflation around the target of 4 percent, to stabilize the economic conditions, and to support the achievement of economic growth at about 6.7 percent. In so doing, credit growth was targeted at around 18 percent. The Government in its Resolution 84 dated 6 September 2017 encouraged the SBV to continue conducting monetary policy in a flexible manner, and mentioned that the credit growth could be boosted to about 21 percent in 2017 to support economic and business activity. No specific credit growth target was, however, mentioned in the latest governmental policy note, Resolution 106 dated 10 October 2017.

[4] According to SBV's Circular 06 in May 2016, the risk weight for real estate loans has been raised from 150 percent to 200 percent, effective 1 January 2017. The weight for real estate loans was lowered from 250 percent to 150 percent in 2015-2016, in accordance with SBV Circular 36 in 2014. Bank lending to the real estate sector rose significantly during the same period.

Box A. Recent Developments in Banking Sector Reform

Ongoing banking sector reform measures have yielded initial positive outcomes. To tackle the NPL problem, a new system of loan classification, which is more in line with internationally-accepted standards, has been adopted since 2014. While this has brought about enhanced transparency and consistency in NPL data reporting, the practice of reporting different NPL data, classified by potentially different sets of criteria, remains. To support banks in resolving the NPL stock accumulated in the aftermath of excessive credit leverage and asset bubbles in 2007-2010, the Vietnam Asset Management Corporation (VAMC) was established in 2013 to acquire and resolve NPLs, and a legal framework facilitating the setup of a debt trading market in Vietnam has also been developed. The VAMC acquired about VND 249,345 billion worth of NPLs as at end-2016, equivalent to about USD11.3 billion, of which about 21.56 percent has been disposed thus far. A recent review of NPL resolution progress in 2011-2016 has identified key bottlenecks to a speedier process, including the VAMC's still-limited capacity, weak enforcement of creditor's rights, and regulatory deficiencies to the development of an active debt trading market. On a positive note, several banks have reportedly repurchased their NPLs which were earlier transferred to the VAMC, prior to the maturity date of the special VAMC bonds, and written off those loans from their books.

Macro-prudential tools have been increasingly employed to address vulnerability in the financial system. The SBV tightened prudential regulations on banks during 2010-2011 by raising the risk weights for real estate loans and bank lending for securities investment purposes, but relaxed these regulations in 2014, following a period of credit slowdown. Prudential regulations were tightened again with the SBV issuing Circular 06 in May 2016 to increase the risk weight for real estate loans from 150 percent to 200 percent, effective from January 2017, as well as to lower the ratio of short-term funds to medium- to long-term lending from 60 percent to 50 percent by end-2017 and further to 40 percent by end-2018[5]. The SBV has also laid out a timeline for banks to adopt the Basel II standards for the capital adequacy ratio, with the regulatory minimum of 8 percent being applicable to the top (10) banks by January 1, 2019 and to the rest by January 1, 2020.

A number of institutional changes have been initiated recently to speed up banking sector reform. The National Assembly endorsed in June 2017 a pilot scheme of NPL resolution (Resolution 42), which seeks to accelerate the pace of NPL collection through the sales of collateral assets, with banks and asset management companies now being able to sell bad debts and their pledged assets at market prices to both legal entities and individuals. Resolution 42 also enhances the rights of creditors to liquidate against mortgage assets and allows a fast track court procedure for cases involving bad debts and their collateral assets. Another important legal document which has been approved recently is the Plan of restructuring credit institutions, with a focus on NPL resolution for 2016-2020. According to the Plan, dividend payout policies on State-Owned-Commercial Banks (SOCBs) may be adjusted to allow those banks to retain State dividends for recapitalization purposes. The Plan also laid out the principle that the public resources, including the state budget, could be used for bank recapitalization purposes, provided that banks' NPLs had arisen from public investment activities. The Plan also provides a specific timeframe and steps to strengthen the VAMC by 2020. As part of the plan, an amended law to the current Law on Credit Institutions and Foreign Bank Branches has been endorsed by the National Assembly, laying specific steps for restructuring weak banks, including dissolution and bankruptcy. The use of public resources, including the state budget, for the purpose of bank recapitalization, however, has not been specified in the amended Law.

Challenges to a speedier process of banking sector reform remain. The progress of NPL resolution at the VAMC has been modest, partly due to VAMC's relatively limited capital and human resources. Despite a plan to strengthen its capacity by 2020, the VAMC is still facing limitations in terms of capital and human resources. In addition, a number of bottlenecks preventing the development of an active debt trading market remains, including those related to property ownership by foreign investors. In light of fiscal constraints and moral hazard concerns, it is likely that the use of public resources for bank recapitalization purposes will continue to be delayed.

[5] It is envisaged that the SBV will extend the deadline of applying the ceiling of 45 percent from 01/01/2018 to the end of 31/12/2018 and 40 percent from 01/01/2019 onwards..

9. **Reform momentum has strengthened in a still-vulnerable banking sector.** The financial system remains fragile as banks are still faced with low capital adequacy ratios and sizeable NPLs. Banks' capital adequacy ratio has trended down across State-owned-commercial banks (SOCBs) and joint stock banks (JSBs) since 2012. SOCBs recently reported their CAR (based on Basel I standards) close to the regulatory minimum level of 9 percent; whereas that for JSBs declined to 11.5 percent, as of June 2017. Banks' equity capital increased but at a slower pace than the expansion in banks' assets, driving their capital adequacy ratios lower. Banks continued to make provision for legacy NPLs amid the recent rapid loan growth. SOCBs' dividend payouts to the State, as their largest and majority shareholder also accounted for more than half of those banks' net incomes. While the official NPL ratio has been contained at below 3 percent, concerns remain with the unresolved NPLs at the VAMC, which is equivalent to about 3 percent of total loans outstanding (Figure 6). Banks' profitability indicators have improved since 2016, but are still weak. A number of institutional changes have been initiated recently to step up the banking sector reform process, including the endorsement of a pilot NPL resolution scheme (Resolution 42) and a Restructuring Plan for the Banking Sector in 2016-2020 (Box A).

10. Authorities' Views: Authorities' Views: The authorities reiterated their commitment towards accelerating the process of banking sector reform and NPL resolution, which, in their views, would help mitigate risks in the banking sector and improve Vietnam's economic prospects. In this regard, the VAMC has functioned as a special vehicle to assist banks and other credit institutions not only in resolving their NPLs but also in their restructuring process. Those reform efforts have contributed to containing the official NPL ratio at below 3 percent in 2017. The authorities also committed to improve the legal infrastructure for bank supervision and credit quality control, contributing effectively to NPL resolution and strengthening financial soundness. The authorities also highlighted the exponential growth in the Vietnam's stock and bond markets in 2017, which ranked Vietnam among the fastest-growing markets in Asia. The recovery of global and domestic economic growth have supported the robust and stable growth of Vietnamese stock market in 2017[6]. In the government bond market, there were 612 listed bonds with an outstanding amount equivalent to 23 percent of GDP, as at end-2017. With the establishment of a derivative market in August 2017, the trading volume has been increasing rapidly[7].

[6] As at end-December 2017, the VN-Index of the Ho Chi Minh Stock Exchange reached 984.42 points, up by 48 percent from a year earlier, peaking in the past ten years. The Hanoi Stock Exchange Index, HNX-Index, also increased by 46 percent in 2017. The market capitalization has increased by 80.5 percent compared to 2016, equivalent to 70.2 percent of GDP in 2017. The market currently has listed 731 stocks and fund certificates and 679 stocks are transaction registered.
[7] On a monthly basis, average number of contracts and trading volume per trading session has increased by 51 percent and 59 percent, respectively.

A.4 Fiscal Sector

11. Fiscal position improved in 2016 on the back of a significant increase in land-based revenue and a boost from SOE equitization proceeds. Total revenue increased markedly to 24.5 percent of GDP in 2016, from 23.8 percent a year earlier, as losses in tax revenue were more than offset by an increase in non-tax revenue collection. Tax revenue, as a percentage of GDP, declined to below 18 percent in 2016, driven by a lower corporate income tax[8], and weaker oil and customs-related revenues. On a positive note, efforts to enhance tax administration efficiency, higher excise and environmental protection tax rates, and resilient domestic consumption, helped offset partly the recent erosion in tax revenue. Most notably, non-tax revenue increased significantly from 5.2 percent of GDP in 2015 to 6.3 percent in 2016, led by higher land-based revenue, and a boost from SOE equitization proceeds. Total expenditure in 2016 stayed largely unchanged from a year earlier, as the pick-up in current expenses[9] was offset by a decline in capital spending. Against these backdrops, the overall fiscal deficit moderated to 5.6 percent of GDP in 2016, markedly lower than 6.7 percent seen a year earlier (Figure 7).[10]

12. Fiscal developments in 2017 suggest continued improvements from consolidation efforts. Revenue collection in 2017 exceeded the budget plan, aided by buoyant tax revenue and continued strong land-based revenue. As such, fiscal revenue is estimated to increase from 24.5 percent of GDP in 2016 to 24.8 percent in 2017. Fiscal expenditure, meanwhile, is projected to decline from 30.1 percent of GDP in 2016 to about 28.2 percent in 2017, reflecting a decline in current expenditure[11]. Capital spending, meanwhile, increased from 7.3 percent of GDP in 2016 to 7.8 percent in 2017, driven largely by an acceleration in capital investment disbursement in the final quarter of 2017. The overall fiscal deficit is estimated to moderate further to about 3.5 percent of GDP in 2017, in line with the authorities' target. A number of structural measures to enhance tax revenue have been proposed by the Ministry of Finance of Vietnam, as part of implementing the recently endorsed Five-Year Fiscal Plan and Medium-Term Public Investment Plan for 2016-2020 (Table 2).

13. Public debt moderated in 2017, on the back of improved fiscal position. Public debt, including central government debt, central government guaranteed debt, and local government debt, declined from about 63.6 percent of GDP in 2016 to about 61.4 percent of

[8] The corporate tax rate has been lowered from 25 percent to 22 percent since 2014 and further to 20 percent since 2016.

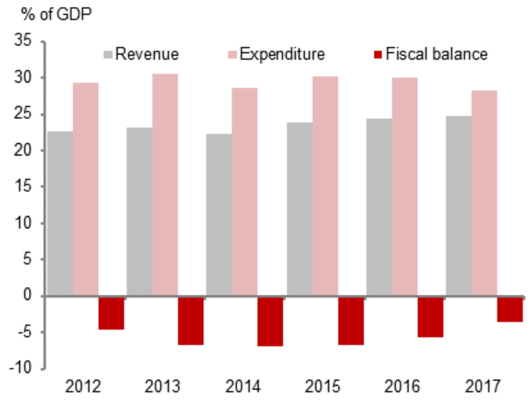
[9] Current expenditure in 2016 rose to 22.8 percent of GDP, from about 20.8 percent in 2015, likely driven by subsidies provided to provinces adversely affected by the prolonged drought and changes in weather conditions, as well as by the Formosa-related incidents.

[10] Prior to 2017, general government budget data reported in line with national accounting standards exclude some capital spending financed by government bond issuance, which subsequently show a deficit of 3.8 percent of GDP in 2016. AMRO staff estimates, meanwhile, include all capital spending financed by government bond issuance. With the State Budget Law 2015 being effective 1 January 2017, the general government budget data from 2017 onwards will include all capital spending financed by government bond issuance, and hence should be consistent with the AMRO staff estimates.

[11] Current expenditure in 2017 is projected to be about 20.7 percent of GDP, moderating from 22.8 percent in 2016 and largely unchanged from 20.8 percent in 2016.

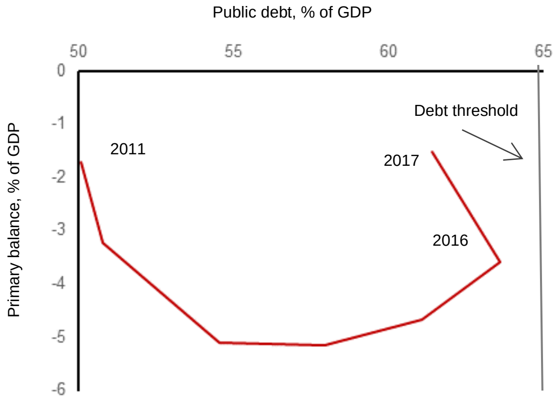
GDP in 2017 (Figure 8). Central government debt level, after picking up to 52.7 percent of GDP in 2016, moderated to 51.8 percent in 2017, mainly on the account of a lower primary deficit. Central government guaranteed debt also stabilized at around 10 percent of GDP, whereas local government debt remained relatively modest at 0.8 percent of GDP.

Figure 7. Fiscal Revenue and Expenditure



Note: Data for 2016 are AMRO staff calculations based on MOF's 2nd estimate for the State Budget in 2016. Total expenditure includes off-budget capital spending financed by government bonds issuance. Data for 2017 are MOF's 1st estimate.
Sources: MOF, CEIC and AMRO Staff Calculations

Figure 8. Primary Fiscal Balance vs Public Debt



Sources: MOF, CEIC and AMRO Staff Calculations

Table 2. Proposed Revenue-Enhancing Measures

Type of tax	Proposed adjustments
Value added tax (VAT)	• Raising the standard rate from 10 percent to 12 percent, effective since 2019 • Broaden the tax base by including a number of goods and services which have been currently exempted from VAT
Excise tax	• Apply a 10-percent tax rate on sugary beverage, effective since 2019 • Raise the excise tax rate on cigarettes and tobacco products from 70 percent to 75 percent from 2019 and levy some specific taxes additionally from 2020 onwards
Corporate income tax	• Review the current incentive system applicable to corporate income tax
Environmental protection tax	• Raise the maximum tax range, such as petrol and fuel products, from the current VND1,000-4,000 to VND3,000-8,000 per liter
Property tax	• Create a property tax in replacement of the current complicated system of taxes and fees based on land

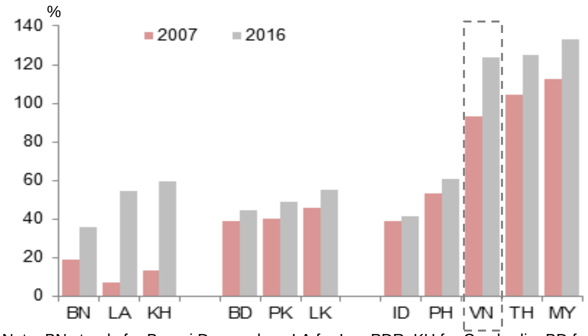
Sources: MOF and AMRO staff compilation

14. Authorities' Views: The authorities broadly concurred with AMRO's assessment on the fiscal sector. According to the authorities, the recent improvement in budget revenue, which exceeds the budget plan target by 8.6 percent amid the adverse impacts of prolonged natural disaster and still-low commodity prices, was driven by a significant increase in revenue collected from land use rights assignment and SOE dividends. In addition, enhanced tax administration efforts, such as coordinated and effective campaign to manage the revenue collection and handle the outstanding tax arrears, also contributed to the increase in state budget revenue. The authorities also pointed out the potential inconsistency in budget statistics prior to 2017 and from 2017 onwards, as the new State Budget law became effective 1 January 2017. Budget expenditure was tightly executed in line with approved budget plan, ensuring the prudent and efficient budget utilization. Also with the new Public Investment Law becoming effective recently, a number of local governments and line ministries were still in process of reviewing current projects as well as those in the pipeline, which led to some slowdown in the pace of capital spending.

B. Risks, Vulnerabilities, and Challenges

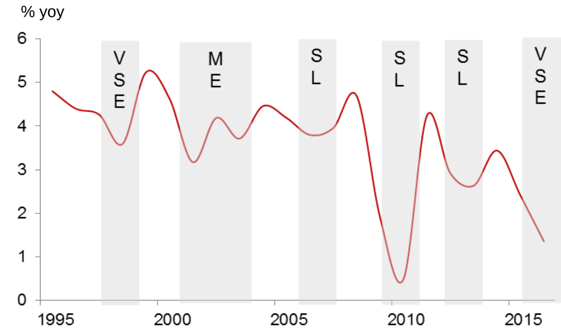
15. **While short-term growth outlook remains positive, downside risks stem from both adverse external shocks and domestic weaknesses.** Policy surprises of the Fed and ECB, and the U.S. administration, could lead to greater volatility in asset prices and capital outflows from emerging and frontier markets, including Vietnam. Imposition of protectionist measures in the U.S. and other trading partners leading to weaker-than-expected global demand may adversely affect Vietnam via trade channels. On the domestic front, as credit growth has been over 18 percent for the past two years and the credit to GDP ratio has risen above 120 percent, which is relatively high in comparison with regional emerging and frontier markets (Figure 9), faster credit growth may lead to excessive lending to non-productive/risky sectors, and reverse the progress made in improving the still-fragile banking system by creating new NPLs and weakening banks' balance sheet.

Figure 9. Credit to GDP Ratio, Selected Economies



Note: BN stands for Brunei Darussalam, LA for Lao PDR, KH for Cambodia, BD for Bangladesh, PK for Pakistan, LK for Sri Lanka, ID for Indonesia, PH for the Philippines, VN for Vietnam, TH for Thailand, and MY for Malaysia.
Source: CEIC, SBV, and AMRO staff calculations

Figure 10. Gross Agricultural Value Added



Note: Shaded areas indicate periods affected by EL Nino/La Nina. VSE stands for Very Strong El Nino, ME-Moderate El Nino, and SL – Strong La Nina.
Source: World Bank, CEIC, AMRO staff calculations

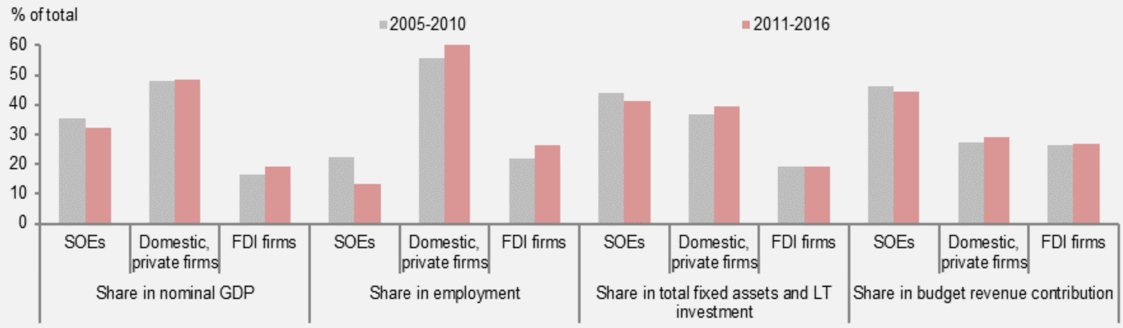
16. **Medium to long-term challenges could arise from climate change, Vietnam's rapidly aging population, and an inefficient domestic sector.** The prolonged drought and severe saltwater intrusion which hit the agricultural sector last year highlight the significant impact of weather conditions on economic activity and growth (Figure 10). While Vietnam is still benefiting from a relatively young population at present, the low fertility rate and higher life expectancy, implies rapid population aging in the next 20 years. The current "generous" social security system will become unsustainable as fiscal burden will increase exponentially with aging population (Annex 1). An aging population could also have important implications on labor productivity and hence long-term growth potential. As growth has become increasingly dependent on total factor productivity (TFP), challenges emanate from raising the productivity of the economy and Vietnam's current weaknesses in a number of competitiveness areas, including market efficiency and governance, human resource quality, technological readiness,

and business sophistication (Annex 2). In the SOE sector, while reform measures have resulted in a decline in the number of SOEs in the past three decades, the SOE sector remains significant in the economy, accounting for a large share of resources while reporting weaker profitability and still-elevated leverage recently (Box B).

Box B. State-Owned Enterprises in Vietnam

State-owned enterprises have had important roles in Vietnam's economy, albeit with gradually diminishing share. While their share in the economy has declined gradually since the early 1990s, SOEs still account for about one third of total economic output until recently. In terms of fixed assets and long-term investment, SOEs have the largest share, followed by domestic, private firms, and foreign-invested (FDI) firms. SOEs have also contributed the largest share to fiscal revenue (Figure B1). SOEs' share in total employment, meanwhile, has been less significant, declining from 22.5 percent on average in 2005-2010 to 13 percent in the past five years.

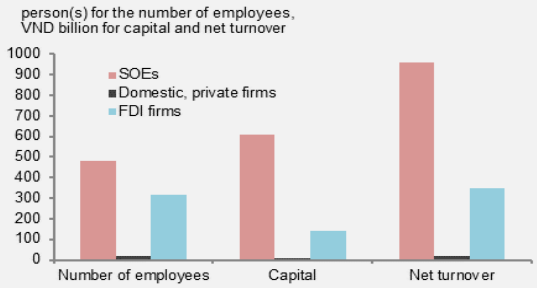
Figure B1. Corporate Sector Share in the Economy, by Ownership



Sources: General Statistics Office (GSO Enterprise Survey Database), CEIC, Ministry of Finance, and AMRO Staff Calculations

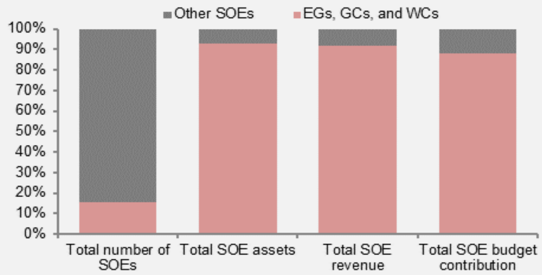
Reform measures to enhance efficiency of public enterprises have led to a significant decline in the number of SOEs since early 1990s. SOE reform measures have been initiated since the early 1990s, aiming to reduce the number and size of SOEs in the economy and to enhance the efficiency of public investment in the remaining SOEs. SOE reforms- including equitization (Vietnamese term for (partial) privatization), mergers and acquisitions, dissolution and liquidation - have reduced the number of SOEs (and enterprises with State controlling shares) from 12,000 in the early 1990s to 4,000 by mid-2000s. Most of the SOEs that were equitized during this period were small-scale firms operating in non-strategic sectors, or those under the management of line ministries and/or local governments. As of 2015, the number of remaining SOEs and firms with State controlling shares totaled 900 enterprises, of which about 650 were wholly state-owned, and the rest with State controlling shares.

Figure B2. Average Size of a Vietnamese Enterprise, 2015



Sources: GSO (Enterprise Survey Database), CEIC and AMRO Staff Calculations

Figure B3. Wholly State-Owned Enterprise Profile, 2015

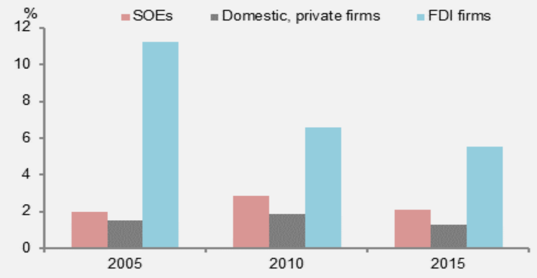


Sources: Ministry of Finance, CEIC and AMRO Staff Calculations

SOEs remains large compared to their peers in the private sector. Figure B2 shows the employment, capital, and revenue size of an average enterprise in Vietnam in 2015, suggesting that SOEs are much larger than both private, domestic firms, and FDI companies (Figure B2). Granular data point to the concentration of power and resources in the largest SOEs. Those SOEs were mainly established after 1994, under the general corporation (GC) model and subsequently further consolidated during 2005-2010, under different categories of economic groups (EG), general corporations (GC), and withholding corporations (WC), having operations in key sectors of the economy, including energy, infrastructure and transportation, post and telecommunication, as well as finance and banking. As of 2015, the group of about 100 EGs, GCs, and WCs accounted for about 93 percent of total SOE assets and 92 percent of total SOE revenue, and 88 percent of total budget revenue contribution by the SOE sector (Figure B3).

Profitability indicators for SOEs have deteriorated recently, amid still-elevated leverage levels. Data on return on assets (ROA) suggest that SOEs' profitability has declined after 2010 (Figure B4). In addition to the negative impact of the global financial crisis, the asset bubble burst in 2011-2012 hit EGs, GCs, and WCs that had expanded into non-core businesses, including real estate, securities investment, and banking and finance, during 2005-2010. More recently, the downturn cycle in the commodity market, in particular for oil and gas, has reportedly had adverse impacts on those SOEs operating in the sector. SOEs' financial leverage, meanwhile, remains elevated, with the debt to equity ratio exceeding 300 percent in 2015, significantly higher than other domestic firms, as well as in comparison with regional peers[12] (Figure B5).

Figure B4. Return on Assets, Vietnamese Enterprises



Sources: GSO (Enterprise Survey Database), CEIC and AMRO Staff Calculations

Figure B5. Debt to Equity Ratio, Vietnamese Enterprises

Sources: GSO (Enterprise Survey Database), CEIC and AMRO Staff Calculations

C. Policy Discussion and Recommendations

17. **In light of strong growth performance in 2017, it is recommended that policy focus on financial soundness be strengthened.** In AMRO's baseline scenario, real GDP is projected to grow at around 6.5 percent in 2017, which is slightly lower than the government's target of 6.7 percent; growth momentum, however, has picked up strongly in the recent quarters. With credit growth exceeding 18 percent for the last two years and the credit to GDP ratio rising to above 120 percent of GDP, a relatively high level compared to regional peers, a further boost to domestic credit may lead to imprudent lending with adverse effects on financial soundness of the banking system. Recent rapid growth in bank lending to the construction and transportation sectors warrants close monitoring and tighter prudential measures could be considered to curb excessive lending to the sectors.

[12] The debt to equity ratio is calculated by AMRO staff using the GSO Enterprise Survey Database, which cover both wholly state owned enterprises and those in which the State keep a controlling share. Meanwhile, according to the Ministry of Finance's report on the performance of wholly state owned enterprises in 2014, the debt to equity ratio among such 780 SOEs is about 150 percent.

18. **Authorities' Views:** The authorities agreed with AMRO staff's views about the broad macroeconomic policy directions going forward, which included maintaining macroeconomic stability (including price and financial stability) while supporting economic growth, and accelerating structural reforms by implementing the Economic Restructuring Plan, including a plan to restructure credit institutions in 2016-2020. On AMRO's assessment that a further boost to credit growth in 2017 may not be necessary in light of the recent strong growth momentum while possibly affecting credit quality, the authorities mentioned that they had received similar advice from other international organizations. In this regard, the authorities reiterated their commitment to conduct the accommodative monetary policy in a prudent manner to ensure financial soundness. Sectoral credit growth had been monitored closely and credit risk management had been enhanced, which led to the recent moderation in the growth rate of real estate loans, as well as bank lending to securities investment.

19. **Efforts to strengthen the external position should be continued.** Vietnam's external position has strengthened in tandem with the recent improvement in economic fundamentals, supported by pro-active trade and investment liberalization policies. Greater flexibility in exchange rate management by the SBV since mid-2015 has improved the economy's resilience against adverse external shocks, while allowing the SBV to rebuild its reserves, which had fallen in 2015 as a result of capital outflows. In light of its still-low reserve adequacy, it is recommended that the SBV continues to build up its reserve buffer over time.

20. **Authorities' Views:** The authorities agreed with AMRO's assessment on Vietnam's external position, which, in their view, continued to improve with the FX reserves rising to the historical high level. Acknowledging AMRO's recommendation that more FX reserves should be accumulated, as the reserves remained low in terms of import cover, the authorities also highlighted the complication in managing the FX market in Vietnam, which was driven by not only economic forces (demand and supply) but also non-economic factors, most notably market expectations and psychology. In this regard, a combination of different policy measures, including the imposition of zero percent interest on USD deposits, had been implemented to curb dollarization. According to the authorities, those efforts have provided incentives for individuals and households to switch from foreign currency denominated deposits to Vietnamese dong denominated deposits, and hence allowed the SBV to accumulate more reserves than suggested by the BOP statistics.

21. AMRO supports the medium-term fiscal consolidation plans and encourages the authorities to continue their revenue enhancing efforts while giving priority to capital expenditure and public sector efficiency improvement. The Five-Year National Fiscal Plan and Medium-Term Public Investment Plan for 2016-2020, which have been approved by the

National Assembly, lay down the framework for fiscal consolidation in the next five years. In the medium term, public debt is to be contained below 65 percent of GDP. In line with this objective, the overall fiscal deficit is envisaged to moderate to 3.5 percent of GDP by 2020 and average 3.9 percent of GDP over the period of 2016-2020. Fiscal developments in 2017 highlight initial positive outcomes of revenue-enhancing measures, and the authorities' ongoing efforts to enhance revenue are welcome. Along with the fiscal consolidation process, priority should be given to growth-promoting adjustments and improving public sector efficiency.

22. **Authorities' Views:** The authorities re-affirmed that their policy focus on fiscal consolidation, while adding that a plan to use e-invoice in domestic transactions had been underway which was expected to enhance tax administration, particularly from the retail sector, and boost tax revenue, even without resorting to tax rate hikes, in the future.

23. In light of the need to expedite NPL resolution and recapitalization of the banking system, recent banking sector reform efforts should be enhanced. A pilot NPL resolution scheme was approved in June, allowing banks and asset management companies to sell bad debts and collateral assets at market prices to a broader base of investors, while enhancing the creditors' rights to liquidate against mortgage assets and facilitating a fast track court procedure for cases involving bad debts and collateral assets. A plan for restructuring credit institutions, with a focus on NPL resolution for 2016-2020, was also approved recently, which opens the possibility of using the State Budget for bank recapitalization purposes, and sets a timeline to strengthen the VAMC capacity. It is envisaged that the capital adequacy ratio of 8 percent under the Basel II standards, will be applicable to the top 10 banks by January 1, 2019 and to the rest by January 1, 2020. To meet this standard, banks are expected to require additional capital. Further efforts to step up the NPL resolution and bank recapitalization process are hence essential.

24. **Policy adjustments to tackle medium- to long-term challenges arising from climate and demographic changes should be well designed and implemented with concerted efforts from relevant State agencies.** In particular, the study of climate change-induced impacts on the economy and design of relevant adaptation and mitigation measures should be accorded high priority. As Vietnam's population is expected to age rapidly in the next 20 years on the back of declining fertility rates and rising life expectancy, the current "pay-as-you-go" system of defined-benefit pension funds and relatively generous healthcare insurance system should be reviewed to ensure sustainability in the medium- and long-term. It is hence welcome that the authorities have started discussion on recalibrating key features of existing social insurance schemes in Vietnam.

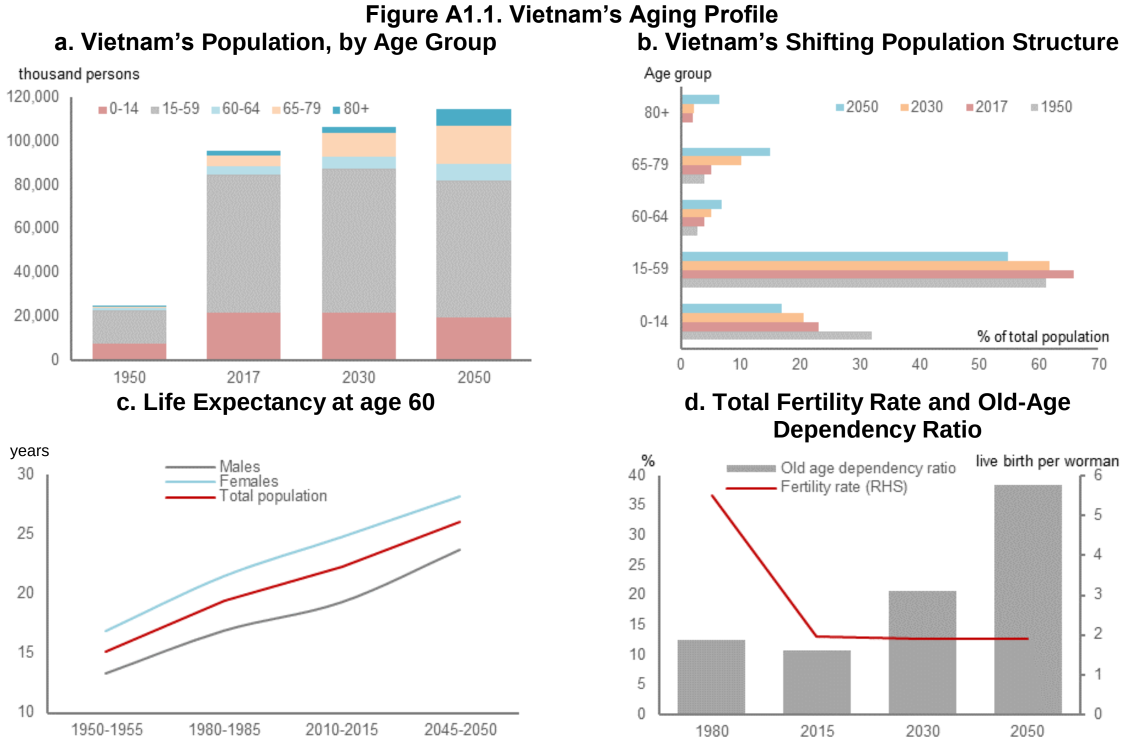
25. For enhancing long-term growth potential, measures to promote the private sector development and to strengthen the integration of local supporting industries into regional and global production networks are essential. In the SOE sector, the pace of divesting State assets has picked up since last year, with the authorities recently releasing a list of SOEs subject to equitization and/or further divestment in 2017-2020. To expedite the process, enhanced financial transparency and strengthened implementation of reform measures are highly recommended. It is also important that the quality of the labor force be strengthened in light of rapid aging. Vietnam's performance in the 2012 Programme for International Student Assessment (PISA) has placed the country above the OECD average[13], indicating a potential talent pool for innovation, awaiting to be tapped into by the right policy mix going forward. Last but not least, measures to develop and foster market institutions, to improve infrastructure and logistics, as well as to enhance technological readiness and innovation, are strongly encouraged.

[13] Vietnam's 15-year olds participated for the first time in the 2012 PISA assessment and ranked the 17th in mathematics, 8th in science, and 19th in reading among 65 participating nations.

Annex 1. Aging and Implications on Vietnam's Social Security System

While Vietnam's population remains relatively young, it is expected to age rapidly in the next 20 years. With the share of young people (below 15 years old) and elderly people (65 years old and above) remaining below 30 percent and 15 percent, respectively, Vietnam is currently benefiting from its demographic dividend/bonus[14]. However, according to official projections using medium fertility variant, Vietnam's demographic bonus is expected to end in 2040 when the share of its elderly people starts exceeding 15 percent of total population. According to the UN population database, Vietnam's population distribution by age group will shift considerably from 2030 onwards, driven by relatively low fertility rates and a rapid rise in life expectancies since the early 2000s (Figure A1.1). In particular, the fertility rate has declined to below the widely accepted replacement rate of 2.1 live births per woman since the early 2000s and is expected to remain low. Life expectancy, meanwhile, is projected to continue increasing, with an average man and woman at age 60 expected to live 24 and 28 more years by 2050, up from 19 years and 25 years in 2015, respectively. Vietnam's old-age dependency ratio[15] is hence projected to increase significantly from about 11 percent in 2015 to 20.8 percent and 38.4 percent in 2030 and 2050, respectively.

Figure A1.1. Vietnam's Aging Profile

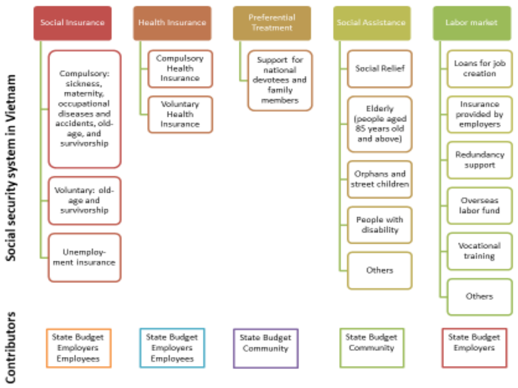


Note: Data from 2017 onwards are projections.
Sources: UN population database and AMRO staff calculations

[14] According to the United Nations Population Fund, demographic dividend is defined as economic growth potential that can result from shifts in a population's age structure, mainly when the share of the working-age population (15 to 64 years old) is larger than the non-working-age share of the population (14 years old and younger, and 65 years old and older).
[15] defined as the ratio between people aged 65 years old and above and people aged between 20-64 years old.

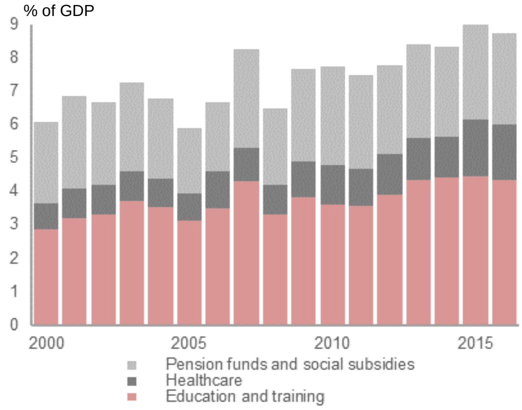
Vietnam's evolving social security system consists of three key pillars: (i) social insurance, mainly old-age pension, (ii) health insurance, and (iii) social assistance. The Vietnam Social Security Fund (VSS) has been established since 1995 to take over pension and health insurance funds from various line ministries and State agencies, including the Ministry of Labor, Invalids, and Social Affairs (MOLISA), Ministry of Health (MOH), and the Vietnam General Confederation of Labor (VGCL)[16]. The social assistance pillar has been separately managed under MOLISA, which includes social support provided to certain vulnerable groups in society[17]. In addition, social assistance related to the labor market has been provided to support redundant labors in term of skill/vocational training and new job seeking (Figure A2).

Figure A1.2. Vietnam's Social Security System



Sources: Bui Tuan Du (2008) and AMRO Staff Compilation

Figure A1.3. Budget Expenditure for Social Sector



Sources: Ministry of Finance, CEIC, and AMRO Staff Calculations

The state budget has played a significantly role in funding Vietnam's social security system. Pension and health insurance funds have been partly financed by the state budget, either in forms of direct employer's contribution and/or subsidies provided to eligible groups under those schemes; whereas social assistance funds have been mainly financed by the state budget (Figure A1.2). Social spending has been the largest item in budget expenditure, accounting for more than 40 percent of current expenditure on average in the past two decades. Figure A1.3 describes the rising trend in social spending from the state budget, suggesting spending on pension funds, as well as on healthcare subsidies, have increased significantly in recent years.

Vietnam's pension fund structure has been characterized by low coverage and imbalances between benefits and contributions. The coverage of the pension funds has been relatively low at only about 20-25 percent of the working-age population, with the authorities targeting to expand the schemes to cover about 50 percent by 2020. In terms of

[16] VSS has been in charge of managing the pension and health insurance funds centrally, under the state supervision of MOLISA, MOH, and Ministry of Finance.
[17] including elderly aged 85 years old and above, orphans and street children, and people with disability and special needs

structure, Vietnam's pension funds follow the "pay-as-you-go" system, with both the contribution and benefit rates being defined. Prior to 2016, the contribution rate was 16 percent of employee/beneficiary's monthly salary with a minimum contribution period of 15 years for retiring; the replacement ratio, meanwhile, was capped at 45 percent of the latest monthly salary after 15 years of contribution, and at 75 percent after 30 years of contribution for men and 25 years of contribution for women. The legal retirement ages have been 60 years for men and 55 years for women, which are relatively low by regional standards. Recognizing that the system is not actuarially sound, the authorities have initiated a number of reform measures to recalibrate the contribution rate and period. In particular, the contribution rate has been raised gradually since 2010 to reach 22 percent from 2016 onwards. Also, in order to enjoy the maximum replacement ratio of 75 percent of the beneficiary's last drawn salary prior to retirement, the contribution period has been lengthened by 5 years to 35 years for men and 30 years for women. No changes to the legal retirement ages, meanwhile, have been made thus far. Despite the recent changes made to the contribution rate and period, the pension fund structure remains imbalanced with benefits, reflected via high replacement ratio, being relatively generous in comparison with contributions, reflected through the contribution rate and period requirements.

Sustainability issues arising from existing structural imbalances in Vietnam's current pension fund system will become more evident in the context of aging. As mentioned earlier, Vietnam's population is expected to age rapidly in the next 20 years in tandem with relatively low fertility rates and higher life expectancy (at retirement ages). This will have negative impacts on the current pension fund structure via less contribution from a smaller group of working-age population and higher expenditure on a larger and longer-living group of beneficiaries. While contribution receipts are currently higher than benefit payments, contributing to the continued accumulation in Vietnam's pension funds[18], it is projected that the funds could be depleted within a foreseeable future. According to AMRO staff's preliminary calculations, spending on pension benefits will continue to expand faster than under the status quo scenario with no population change until 2060, thus leading to a significant increase in the fiscal expenditure amid growth moderation (Box C). Other countries' experience in reforming the pension fund system in the context of aging, meanwhile, suggests that making further revisions to the current system, by either increasing contribution rates and/or lowering the benefit level/replacement ratio, as well as raising the legal retirement ages could be socially and politically challenging/sensitive.

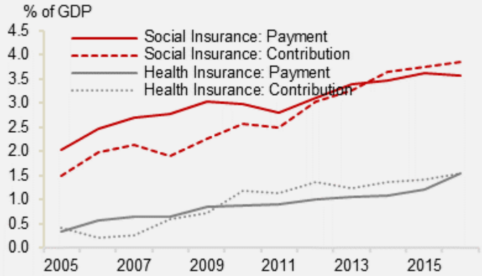
[18] As of 2016, pension funds outstanding was about VND453,487 billion, equivalent to slightly above 10 percent of GDP. Of which, about 90 percent belonged to the compulsory pension fund and the remaining 10 percent were with the voluntary pension fund. In 2015, the contribution receipts were equivalent to about 2.3 percent of GDP whereas expenditure/benefit pay-outs were about 1.6 percent of GDP.

Box C. Medium-term Fiscal Impacts of Aging Population in Vietnam

Vietnam's social security system has been expanding in terms of coverages. Social insurance and health insurance, two main pillars of the nation's social security system, have seen a significant rise in the national coverage in terms of memberships. As of 2016, 13.9 percent of total population is being covered by social insurance, up from 7.5 percent in 2005. Health insurance membership amounted to 81.9 percent of total population in 2016, up from 28.2 percent in 2005. In terms of the fund flows, annual benefit payments in social insurance and health insurance have increased largely in tandem with the contributions amid accumulations in the fund stocks (Figure C1). As of 2016, the pension funds outstanding amounted to VND 453,487 billion, or about 10.1 percent of GDP.

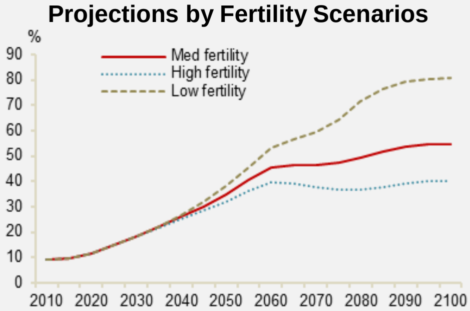
Vietnam is projected to face rapid population aging in the next several decades. Vietnam is currently moderately aging, while remaining young in the region, compared to other aging countries such as Japan and Korea. However, according to the UN projections, Vietnam is expected to face rapid population aging in the next several decades, pushing up old-age dependency ratios until 2060 (Figure C2). From a longer-term perspective, rapid aging population is highly likely to lead to fiscal burdens, when combined with the government's policy stance to expand further the coverage of social security to meet rising demands in line with the progress of industrialization and modernization.

Figure C1. Social Insurance and Health Insurance Payment and Contribution



Source: Vietnam Social Security, AMRO staff calculations

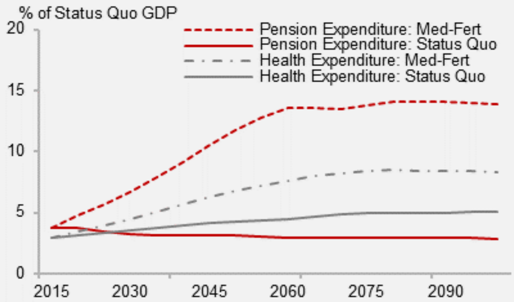
Figure C2. Old-age Dependency Ratio Projections by Fertility Scenarios



Source: United Nations

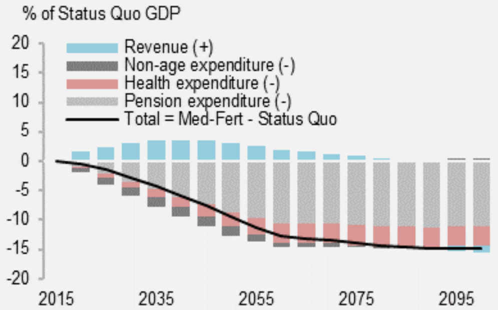
AMRO staff calculations suggest that Vietnam's rapid population aging will incur accelerating payment burdens amid moderating growth, thereby deteriorating the fiscal balance. A counterfactual simulation was conducted to assess fiscal consequences of demographic shifts, based on the approach proposed by Amaglobeli and Shi (2016).[19] This exercise aims to compare the two medium-term fiscal balance trajectories: one under the UN's medium-fertility scenario, which is the most likely projection, and the second under the status quo scenario, where the population is fixed at the 2015 level.[20] In essence, preliminary calculations shows that until 2060, the spending on pension benefits will continue to expand faster than that under the status quo scenario with no population changes, thus leading to a significant increase in the fiscal expenditure amid growth moderation (Figures C3 and C4).

Figure C3. Impacts of Aging Population on Social Security Expenditures



Note: Based on the approach by Amaglobeli and Shi (2016).
Source: United Nations, OECD, ILO, AMRO staff calculations

Figure C4. Impact of Aging Population on Fiscal Balance



Note: Based on the approach by Amaglobeli and Shi (2016).
Source: United Nations, OECD, ILO, AMRO staff calculations

[19] Amaglobeli, D. and W. Shi (2016), "How to Assess Fiscal Implications of Demographic Shifts: A Granular Approach", International Monetary Fund.
[20] The pension expenditures are calculated as the product of four key elements: i) the replacement rate, ii) the coverage ratio, iii) the old-age dependency ratio, and iv) the inverse of labor market participation. In contrast, the pension contribution revenues are assumed to grow in proportion to long-term output estimates.

The fiscal burden stemming from a heavily-subsidized healthcare insurance system may rise exponentially with aging population. The national health insurance system covers about 82 percent of total population, and about half of its participants are partially or fully funded by the government. The health insurance fund balance in 2017 is projected to turn into a deficit, driven by higher healthcare service charges while the contribution rate is kept unchanged. Rapid aging, in interaction with higher income levels and continued expansion in the healthcare insurance coverage[21], will imply even greater fiscal burden arising from Vietnam's heavily-subsidized healthcare insurance system in the future. In this regard, upward adjustments to the contribution rate, and a thorough review of existing benefits, which are not subject to any caps at present, are needed, in order to ensure the sustainability of system and keep the fiscal burden in check going forward.

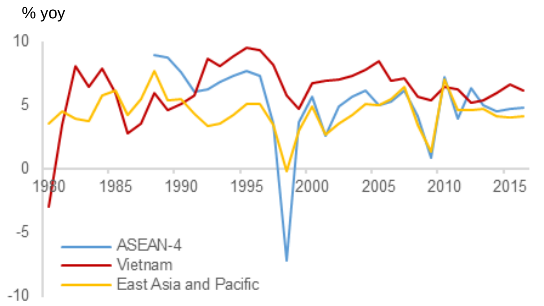
Lastly, a rapidly-aging population could also have implications on budget spending on social assistance for the elderly. While the ratio of the elderly aged 85 years and above who are entitled to social assistance remains small in Vietnam thus far, this is expected to increase in tandem with the rise in the life expectancy, and hence will require more public resources in the future.

[21] A universal coverage is sought by 2020.

Annex 2. Boosting Productivity for Sustaining Long-term Growth Prospects

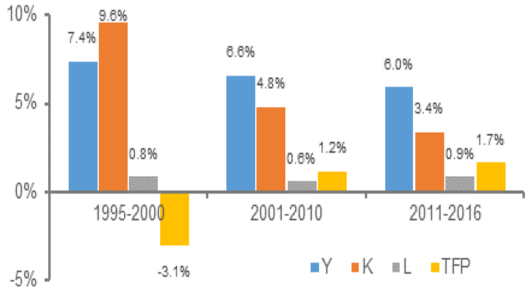
Vietnam's economy has grown rapidly in the last three decades, with an increasing contribution of total factor productivity in recent years. Bolstered by "Đổi Mới" (which means reform or renovation in Vietnamese) – launched by the government in 1986 to transform Vietnam from a planned economy into a market-oriented one, economic growth accelerated to 8-9 percent in the early 1990s, before declining during the Asian Financial Crisis and hovering around 7 percent in the early 2000s. Although growth has slowed somewhat, it remains relatively robust in comparison with regional peers (Figure A2.1). While capital and labor inputs played a significant role in contributing to overall growth in the 1990s and early 2000s, the share of total factor productivity (TFP) has apparently increased in the recent years (Figure A2.2 and Box D).

Figure A2.1. Real GDP Growth: Vietnam vs Asia, 1980-2016



Note: ASEAN-4 includes Indonesia, Malaysia, the Philippines, and Thailand.
Source: WB, IMF, National Authorities, CEIC

Figure A2.2. Real GDP Growth and Factor Input Contribution



Note: Y = Real GDP growth, K = Capital Input Growth, L = Labor Input Growth, and TFP = Total Factor Productivity Growth.
Source: WB, GSO, ILO, and AMRO staff calculations

Factors Driving the Recent Pick-up in Total Factor Productivity

Sustained productivity of capital[22] in the past ten years is driven mainly by the FDI sector, in tandem with increased FDI inflows to Vietnam. Enterprise survey data reported by the General Statistics Office (GSO) suggest a slight moderation in the net turnover to capital ratio from 0.8 on average in 2005-2010 to 0.7 in 2011-2015. The net turnover[23] to total capital ratio for FDI firms stayed unchanged at 0.9 between 2005-2010 and 2011-2015 (Figure A.2.3). Sustained capital productivity of the FDI sector is likely associated with increased FDI inflows in recent years, and Vietnam's increased integration/participation in the global value chains (GVCs) (Box E). The same ratio for the domestic sector, meanwhile, declined during the same period, with the moderation seen in both SOEs and domestic, private firms[24] (Figure A.2.4).

[22] In this report, capital productivity refers to the net turnover to capital ratio.
[23] According to the General Statistics Office, net turnover is the total income of an enterprise obtained from selling its products and/or services after subtracting taxes (i.e. special consumption tax/excise, import duties, value-added tax by direct payment method) and other exemptions/reductions (such as price discount, return of goods and services). Net turnover does not include income from financial investment activity or non-regular businesses.
[24] As the majority of domestic, private firms in Vietnam are micro, small and medium-sized enterprises (MSMEs), their productivity tends to be relatively low.

Box D. Estimation of Total Factor Productivity for Vietnam

To estimate the sources of long-term economic growth, we adopt the growth accounting framework using the standard neoclassical constant-returns-to-scale Cobb-Douglas production function as follows:

(1) $$Y_t = A_t K_t^{\alpha} (L_t)^{(1-\alpha)}$$

where *Y* = real GDP, *K* = physical capital stock, *L* = employed labor force, *A* = Solow residual that represent total factor productivity (*TFP)*, while *α* and *(1- α)* = share of capital and labor inputs to total output.

Next, taking log differential of the equation (1) and solve for the change in TFP, we obtain:

(2) $$\Delta Log(A_t) = \Delta Log(Y_t) - \alpha \Delta Log(K_t) - (1-\alpha)\Delta Log(L_t)$$

Or in discrete form:

(3) $$\%\Delta A_t = \%\Delta Y_t - [\alpha\%\Delta K_t + (1-\alpha)\%\Delta L_t]$$

In estimating equation (3) for the growth of *TFP*, we sourced data on Real GDP *(Y)* and employed labor force *(L)* from the World Bank while we assumed the share of capital to output *(α)* as a constant rate overtime at 0.4 and thus the labor share *(1- α)* = 0.6, following Park (2010) in his paper title "Projection of Long-term Total Factor Productivity Growth for 12 Asian Economies".

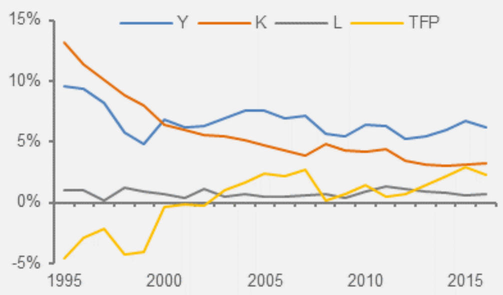
From there, we estimate capital stock series based on the perpetual inventory method (PIM) as follows:

(4) $$K_t = K_{t-1} \times [1 - \delta_{t-1}] + I_{t-1}$$

Where K_t = net capital stock at the beginning of period *t;* K_{t-1} = net capital stock at the beginning of the previous period *t-1*; I_{t-1} is the gross fixed capital formation or investment in the previous period; and δ_{t-1} is the consumption of fixed capital.

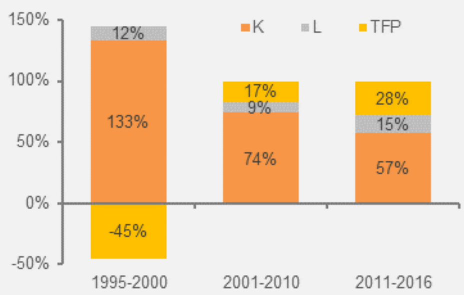
In order to apply the PIM, we take the initial capital stock from the real capital stock data for Vietnam in the Pen World Table in 1994 which were rebased to 2010 price to be consistent with other data we used earlier and converted to the Vietnamese dong from the U.S. dollar using the average official exchange rate of VND per USD from the IMF. Data on gross fixed capital formation and consumption of fixed capital are sourced from the World Bank while depreciation rate is assumed to be 0.06, following Park (2010).

Figure D.1. Real GDP Growth and Factor Input Contribution



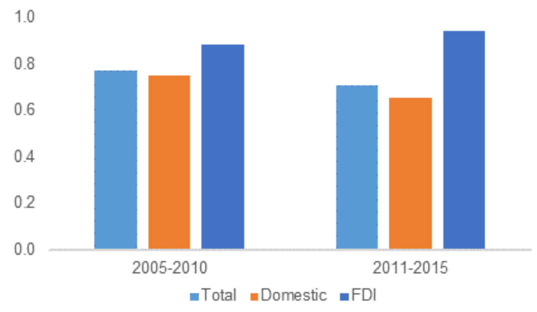
Note: Y = Real GDP growth, K = Capital Input Growth, L = Labor Input Growth, and TFP = Total Factor Productivity Growth.
Source: WB, GSO, ILO, and AMRO staff calculations

Figure D.2. Average Real GDP Growth and Factor Input Contribution



Note: Y = Real GDP growth, K = Capital Input Growth, L = Labor Input Growth, and TFP = Total Factor Productivity Growth.
Source: WB, GSO, ILO, and AMRO staff calculations

Figure A2.3. Net Turnover to Capital Ratio, Domestic vs FDI sector



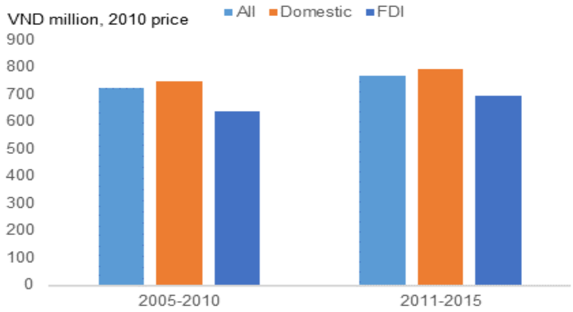
Sources: GSO (Enterprise Survey Database), and AMRO Staff Calculations

Figure A2.4. Net turnover to Capital Ratio, Domestic Sector

Sources: GSO (Enterprise Survey Database), and AMRO Staff Calculations

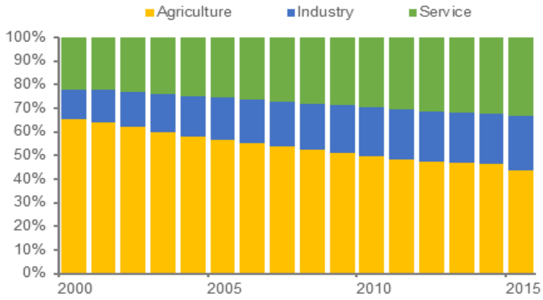
Labor productivity has also increased, likely on the back of the movement of labor from the agricultural sector into manufacturing and services, and improved labor quality over time. Improvement in labor productivity has been broad-based, seen in all sectors of the economy, albeit the pace of growth among the domestic firms has slowed in recent years (Figure A2.5). There has been a significant migration of the labor force from the agricultural sector into sectors with higher productivity, such as manufacturing and services, taking place in the past three decades, likely contributing to increased labor productivity (Figure A2.6). Anecdotal evidence suggests that labor quality in Vietnam has been appreciated by foreign investors, which could be the result of the relatively high literacy ratio and hard-working attitude. Particularly, Vietnam has sustained high enrollment rate in primary and secondary education and its students have performed relatively well in academic terms[25].

Figure A2.5. Net Turnover per Employee, Domestic vs FDI sector



Sources: GSO (Enterprise Survey Database), CEIC, and AMRO Staff Calculations

Figure A2.6. Employment Structure, by Sector



Sources: GSO (Enterprise Survey Database), CEIC, and AMRO Staff Calculations

[25] Vietnam's 15-year olds participated for the first time in the 2012 Programme for International Student Assessment (PISA) assessment and ranked the 17th in mathematics, 8th in science, and 19th in reading among 65 participating nations, which has placed the country above the OECD average.

Box E: Vietnam's Engagement in Global Value Chains

Vietnam records some of the highest levels of global value chain (GVC) integration, in particular backward participation, among ASEAN economies (Figures E1).[26] Vietnam's participation in GVCs in terms of sourcing foreign inputs – the backward GVC participation – is relatively high (about 36 percent of gross exports, as at 2011, up from 21 percent in 1995). Vietnam's participation in terms of providing inputs for further processing – the forward GVC participation – is relatively low (about 16 percent of gross exports, as at-2011, slightly up from 13 percent in 1995). Vietnam's particular pattern of GVC participation reflects its recent transition from exports of primary and intermediate products/natural resources to final manufacturing products and the production of these tends to use a relatively large extent of imported inputs.

Vietnam's relatively high backward GVC participation has been consistent with its structural features and policy factors. Vietnam has been endowed with an increasingly large market size, a relatively competitive labor force, and strategically located within the region as well as for inter-regional trade. Vietnam's favorable trade and investment openness have further contributed to its high level of backward GVC participation. The government's pro-active participation in preferential trade agreements, as well as its FDI promotion policies have been important "pull" factors attracting foreign investors, in particular MNCs, to establish their presence in Vietnam. As a result, Vietnam's inward FDI stock stood at 53 percent of GDP in 2015, among the highest levels in ASEAN (Figure E2).

Figure E1. GVC participation: Vietnam vs ASEAN

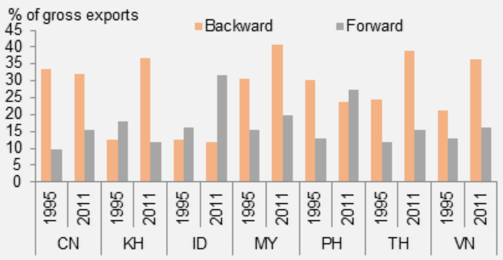
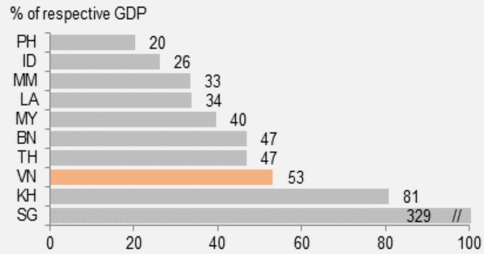


Figure E2. Inward FDI Stock: Vietnam vs ASEAN



Sources: OECD's Trade in Value Added database (TiVA), International Trade Center's FDI statistics, and AMRO Staff Calculations

Figure E3. Vietnam's export structure and growth

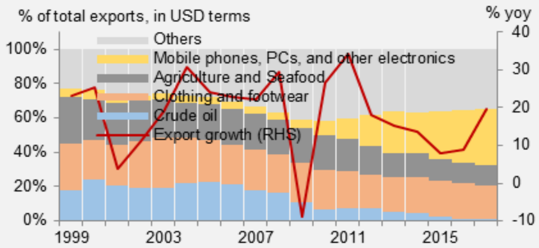
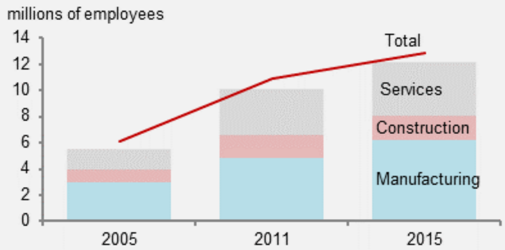


Figure E4. Number of employees, by industry



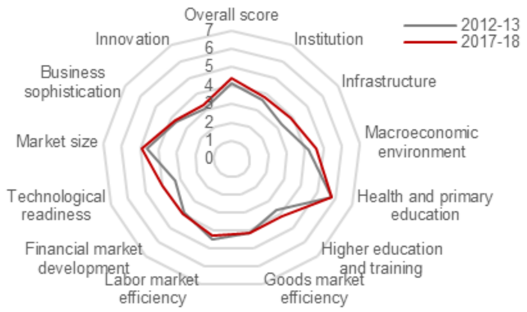
Note: Export data for 2017 are for the first 9 months only. Employment data are from the Enterprise Survey Database, covering formally incorporated enterprises only.
Sources: General Statistics Office of Vietnam, CEIC, and AMRO Staff Calculations.

Vietnam's engagement in GVCs has brought about strong export performance, job creation, as well as robust economic growth, among other benefits. Trade has evolved along the GVC backbone, and Vietnam has emerged as an Asian manufacturing powerhouse specializing in assembly functions by primarily foreign firms. This has supported the diversification in the export structure toward higher value-added manufacturing products (Figure E3), with granular trade data indicating the remarkable performance in electronics, textiles and apparel, and agriproducts. The economy has benefited from its export-oriented manufacturing sector, where export opportunities created jobs and supported economic growth (Figure E4).

[26] To assess one economy's participation in the Global Value Chains (GVCs), two major indicators, backward and forward GVC participation, are taken into account. The backward GVC participation index captures the extent to which domestic firms use foreign intermediate value added for exporting activities in a given country. The forward GVC participation index captures the extent to which a given country's exports are used by firms in partner countries as inputs into their own exports. While both of these measures are expressed as shares of the reference country's exports, in fact they measure very different forms of engagement. For example, a country that is predominantly assembling products into final goods and subsequently exporting these will have a strong backward participation index but a small forward participation measure. Conversely, a country which predominantly supplies intermediates to an assembler will have a highly developed forward participation indicator but a small backward participation measure. These participation measures therefore give us a metric of engagement in the form of buying from (backward participation) and selling (forward participation) to GVCs or the demand and supply sides of the value chain activity.

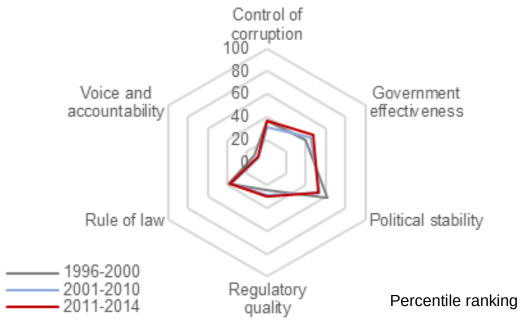
Vietnam's technological readiness, innovation and institutional quality have also improved, contributing to a pick-up in total factor productivity in recent years. Vietnam's rankings in the World Economic Forum (WEF)'s Global Competitiveness Index (GCI) moved from the 75th place in 2012-2013 to the 55th place in 2017-2018, driven by the improvement in its scores in technological readiness and innovation, among other factors (Figure A2.7).[27] The upward move in technological readiness has been supported by improved availability of latest technologies, firm-level technology absorption, and FDI and technology transfer; while that in innovation has been led mainly by increased spending on research and development (R&D) at firm levels and strengthened university-industry collaboration in R&D activity, as well as higher number of patent applications in recent years. This could be seen as the early sign of positive spillovers of the FDI sector into other sectors of the economy, in particular domestic supporting industries. GCI's rankings also suggest Vietnam has scored improvement in market efficiency, particularly in the labor and financial markets. In a related note, the World Bank's Worldwide Governance Indicators (WGI) database show Vietnam has made progress in terms of government effectiveness and regulatory quality (Figure A2.8).

Figure A2.7. Vietnam's Score in Global Competitiveness Index



Note: Score ranges from 1 to 7. Higher score means better performance.
Source: WEF

Figure A2.8. Vietnam's Governance Ranking



Note: Data are in percentile ranking out of a sample of 215 countries and territories over the period of 1996-2016 for six dimensions of governance.
Source: World Bank (WGI Database)

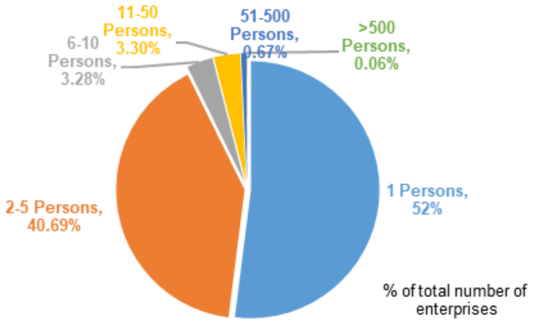
Growth Outlook and Policy Implications

It is expected that Vietnam's long-term growth prospects will be increasingly dependent on total factor productivity. While Vietnam's economic growth has remained relatively buoyant relative to regional peers, it has slowed down in recent years, driven by a moderation in the contribution of both capital and labor inputs. The contribution of the labor (quantity) input to overall growth could also decline over time as the population is expected to age rapidly in the future. In this regard, it is important that policy measures should be taken to enhance total factor productivity going forward.

[27] In particular, Vietnam moved from the 98th and 81st places (out of a total of 144 countries) for technological readiness and innovation, respectively, in 2012-2013 to the 79th and the 71st places (out of 134 countries), respectively, in 2017-2018.

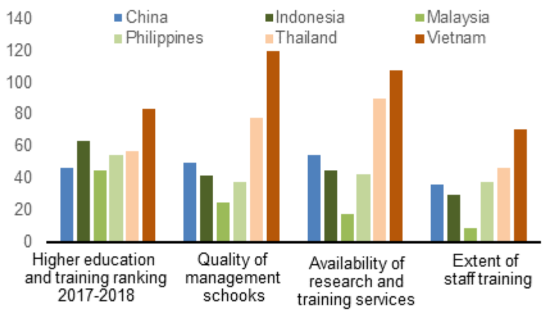
For strengthening the positive spillover of a more efficient FDI sector to the rest of the economy, efforts to expedite SOE reform and private sector development are strongly encouraged. As mentioned earlier, while SOE reform measures have resulted in a decline in the number of SOEs in the past three decades, the SOE sector remains significant in the economy, accounting for a large share of resources while reporting weaker profitability and elevated leverage relative to other sectors in the economy. Recent efforts to step up the SOE equitization in 2016-2020 are hence strongly encouraged and measures to enhance SOE financial transparency and governance are highly recommended. Lack of scale among domestic firms (Figure A2.9) and still-weak linkages between local industries and regional/global value chains have been identified as hurdles to a strong private sector in Vietnam. Promoting the private sector development and strengthening the integration of local supporting industries into regional and global production networks are hence important.

Figure A2.9. Vietnamese Enterprise Composition, by Employment Size



Source: General Statistics Office of Vietnam (Enterprise Survey Database)

Figure A2.10. GCI's 5th Pillar on Higher Education and Training: Vietnam vs selected ASEAN+3



Note: Lower rankings indicate better performance.
Source: World Economic Forum

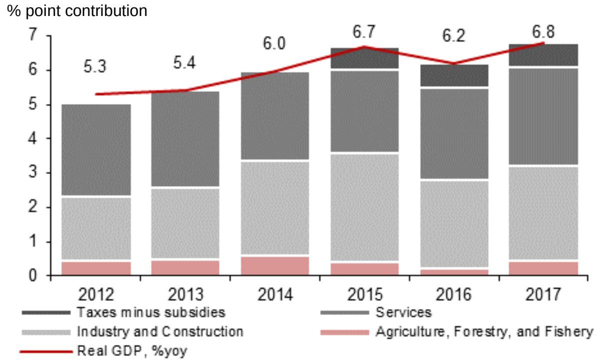
Competitiveness in areas where Vietnam lags behind its regional peers should be further enhanced. With regard to market efficiency, efforts to strengthen property rights and private institutions, which is closely related to private sector promotion, are recommended. The recent improvement in Vietnam's ranking in technological readiness and innovation has been driven mainly by changes made at firm levels, suggesting room for more pro-active government policies. In particular, the curriculum of existing government-subsidized vocational training programs could be re-designed/improved to better serve industrial needs. Compared to regional peers, Vietnam still has a significant gap, mainly in education quality (especially at higher level), expenditure on education, number of researchers and the expenditure on R&D (Figure A2.10). Given the current fiscal constraints and hence limited room for raising budget spending on education and training, as well as research and development (R&D), efforts to enhance the efficiency of such spending should be encouraged.

Appendices

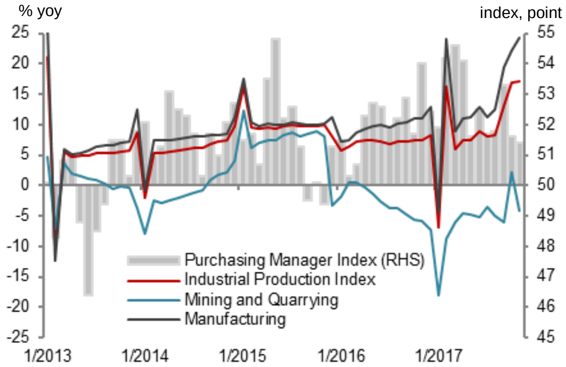
Appendix 1. Major Economic Indicators for Vietnam

Figure 1.1. Economic Growth and Real Sector

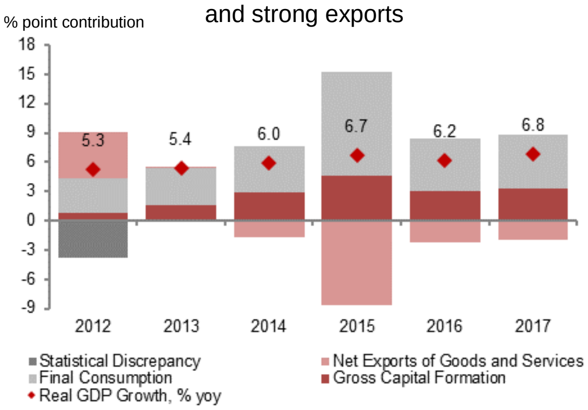
Economic growth rebounded strongly in 2017, with the support of solid manufacturing and robust services sector.



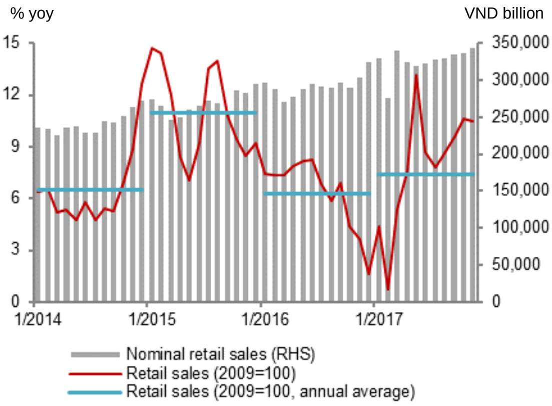
Manufacturing has expanded robustly, whereas mining and quarrying output remained in contraction.



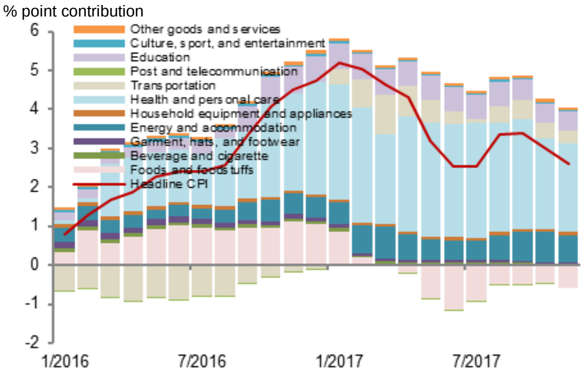
Growth momentum acceleration was driven by strengthened domestic consumption and investment, and strong exports



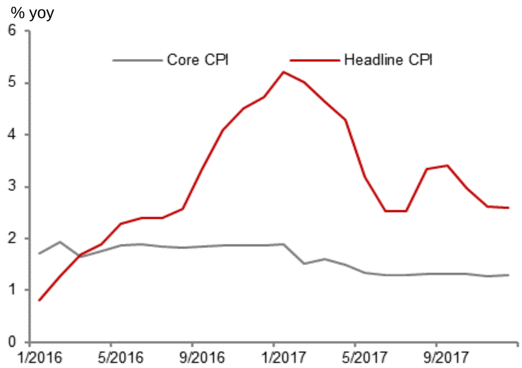
… in particular consumer spending/final consumption.



Higher fuel prices and planned hikes in State-administered prices drove headline CPI higher in 2017.



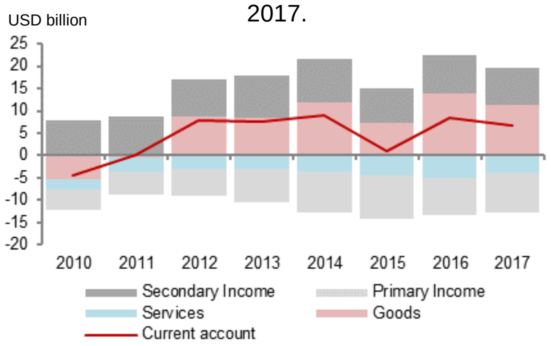
However, underlying inflationary pressure remained subdued, with core CPI inflation stabilizing at 1.3 percent for the past 7 months.



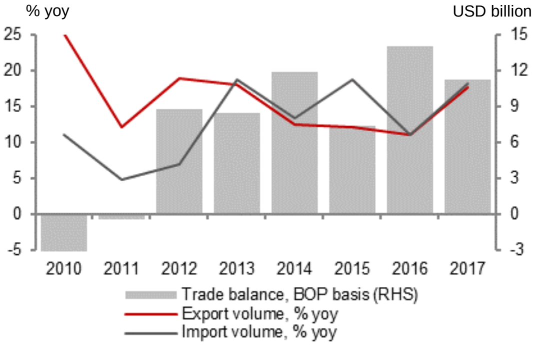
Source: General Statistics Office, Nikkei/Markit, and AMRO Staff Calculations

Figure 1.2. External Sector

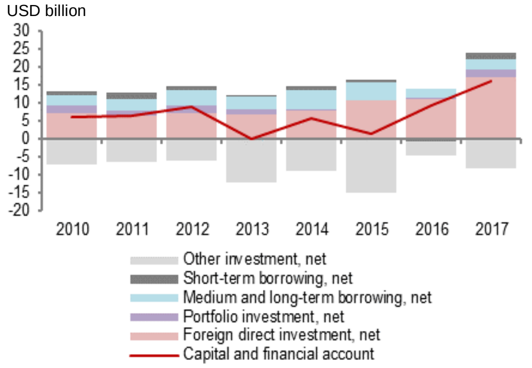
Trade surpluses and remittances are expected to continue supporting the current account surplus in 2017.



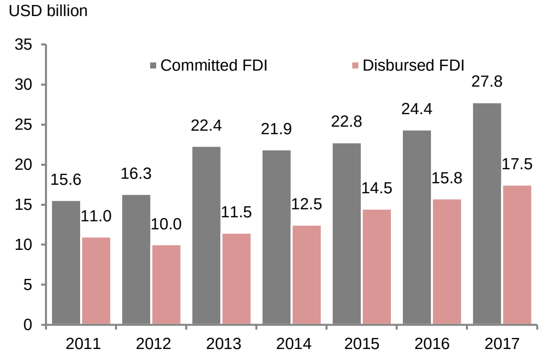
Trade balance has improved recently, aided by a pick-up in export growth.



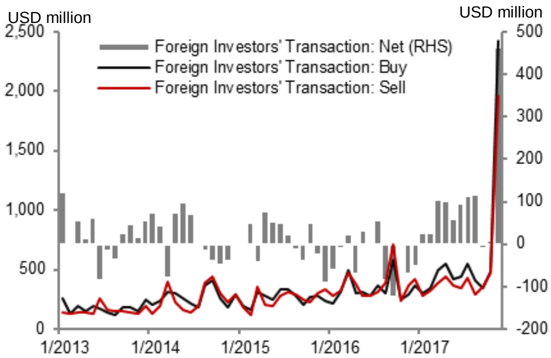
The capital and financial account also remains in surplus, …



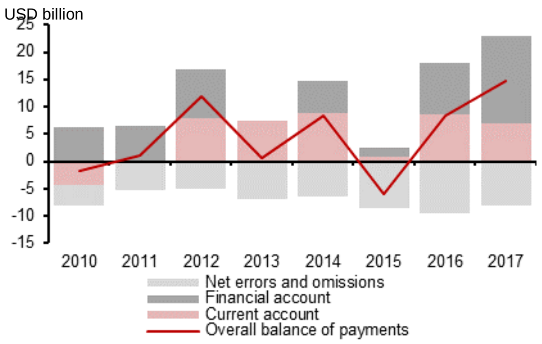
… benefiting from increased FDI, as well as …



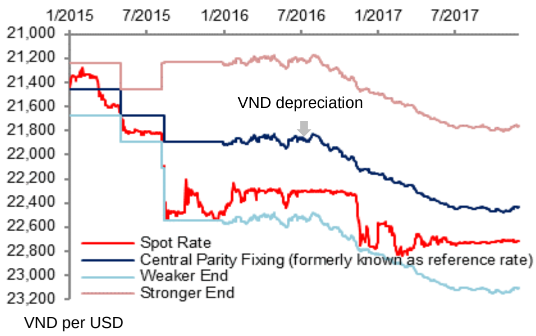
… portfolio investment inflows.



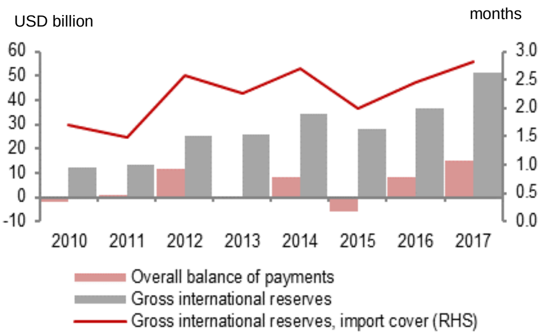
External position has strengthened with continued overall balance of payment surplus.



The *dong* has been relatively stable recently.



Gross international reserves increased significantly in 2017.

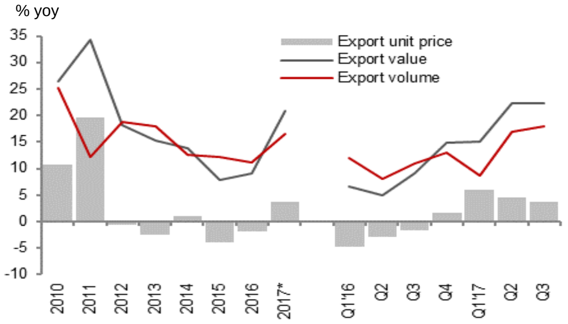


Note: */ BOP data for 2017 are AMRO staff projections. The reserves data meanwhile are provided by the State Bank of Vietnam.
Source: State Bank of Vietnam, General Statistics Office, IMF, Thomson Reuters Datastream, CEIC, and AMRO staff estimates.

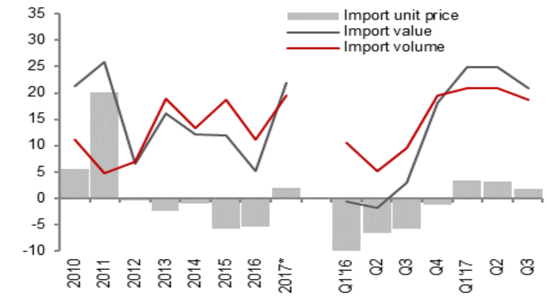
% yoy

Figure 1.3. External Trade

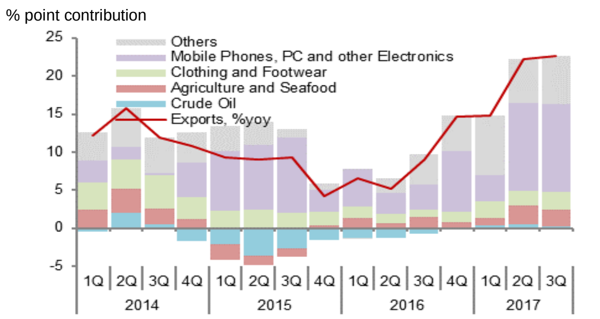
Export growth has rebounded since Q2 2017.



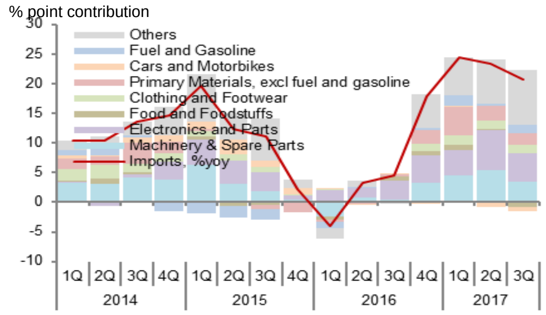
Import growth has moderated but remained elevated.



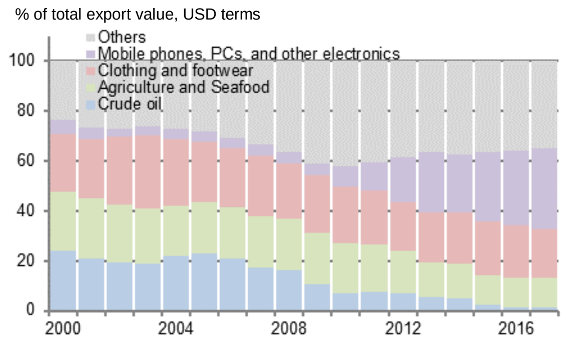
Exports rebounded on the back of ITC exports, likely linked to the release of new Samsung mobile phone models and a pick up in ITC/semiconductor demand globally.



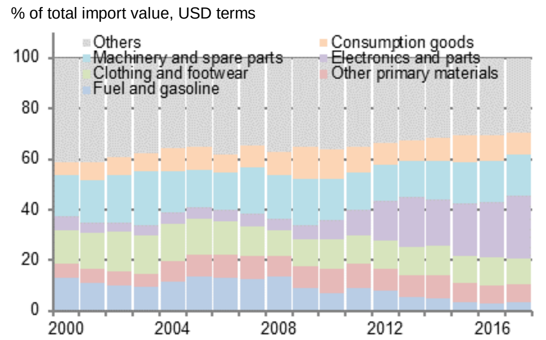
While elevated imports were driven by a broad-based increase in capital and intermediate goods imports.



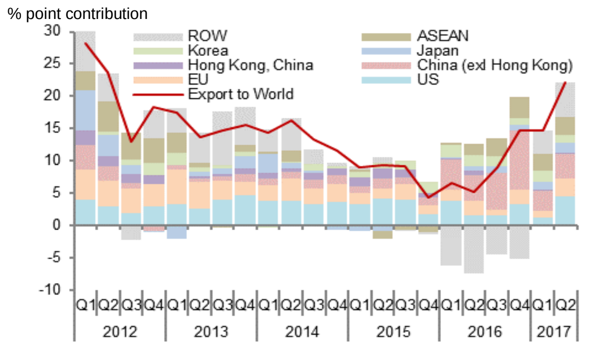
Export structure have shifted to higher value-added products such as ITC in recent years…



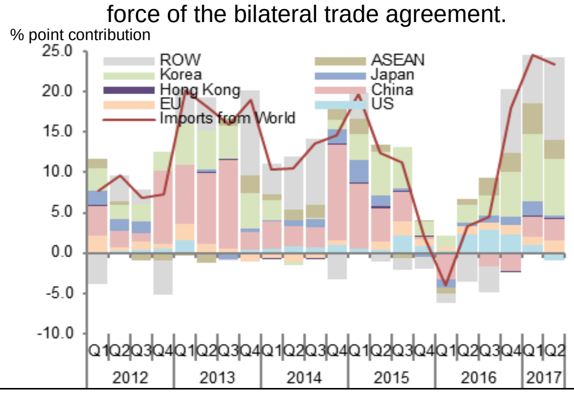
… accompanied by a similar shift in the import structure.



Export growth has been supported by robust expansion to ASEAN+3 markets, while growth in US and EU markets seems to slow somewhat

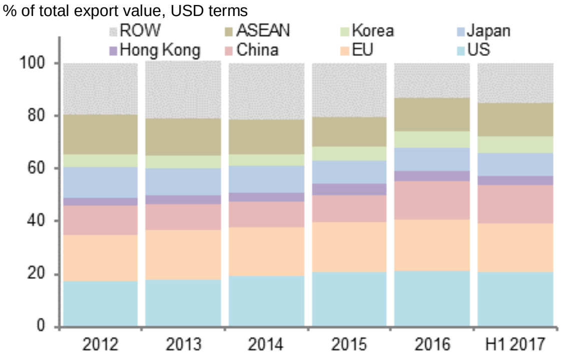


Growth in imports from Korea has picked up significantly in tandem with the coming into the force of the bilateral trade agreement.



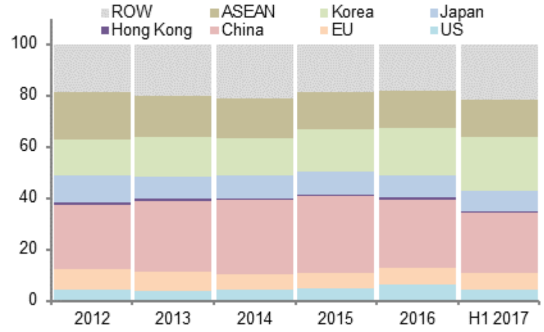
China has surpassed Japan to become the third largest export market for Vietnam, after only the US and EU

% of total export value, USD terms



China remains the largest source of capital and intermediate good imports for Vietnam, but Korea is catching up quickly.

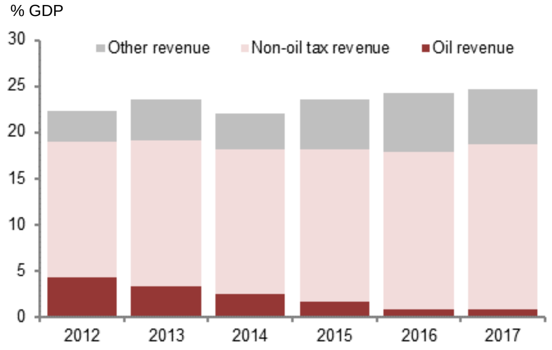
% of total import value, in USD terms



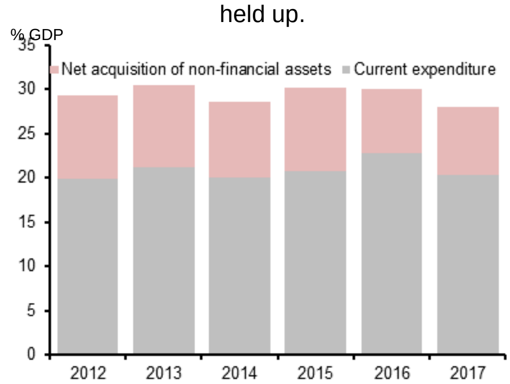
Source: General Statistics Office, IMF (DOT database), CEIC, and AMRO staff estimates.

Figure 1.4. Fiscal Sector

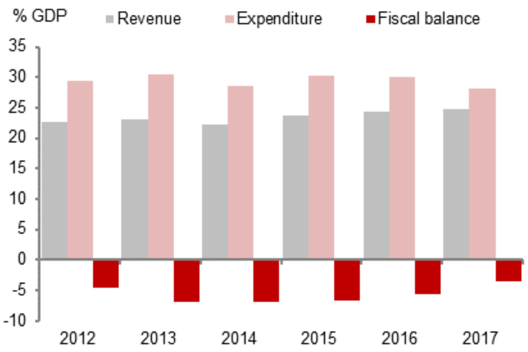
Fiscal position improved on the back of a significant increase in land-based revenue and a boost from SOE equitization proceeds.



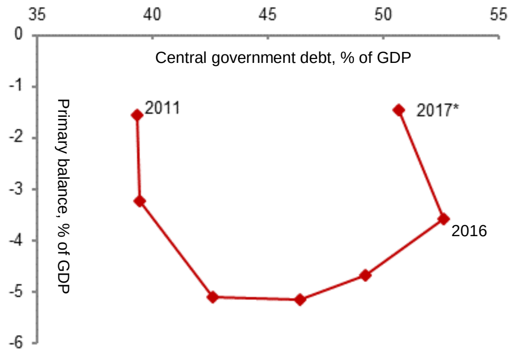
Total expenditure moderated on the back of declining current spending while capital spending held up.



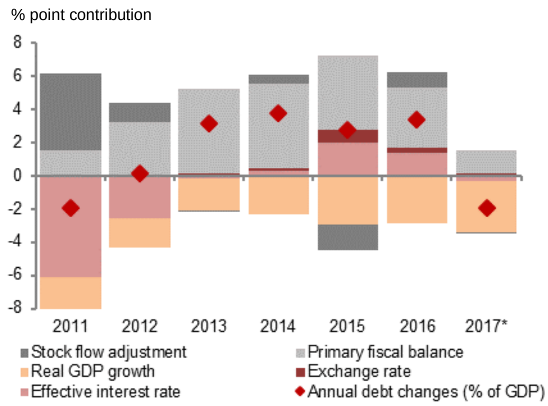
The overall fiscal deficit moderated from about 5.6 percent of GDP in 2016 to 3.5 percent in 2017, in line with the budget.



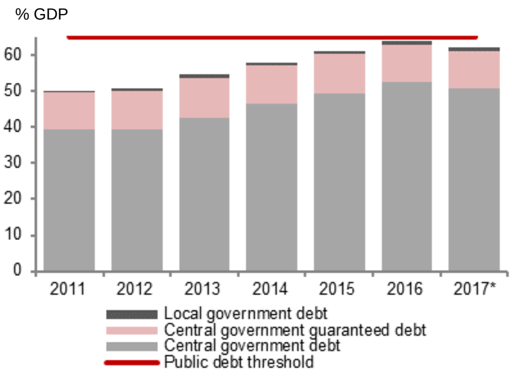
Central government debt to GDP ratio is hence estimated to moderate…



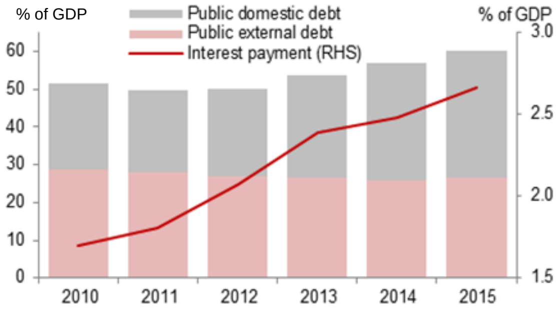
… due to the contraction in primary deficit.



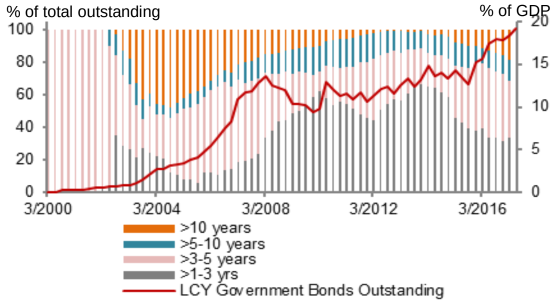
Likewise, public debt declined from 63.6 percent of GDP in 2016 to 61.4 percent in 2017.



The authorities have increasingly relied on domestic sources to finance their debt…



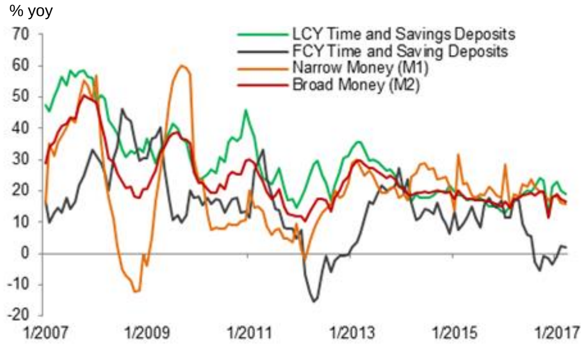
…, particularly via the issuance of LCY government bonds of longer maturities recently.



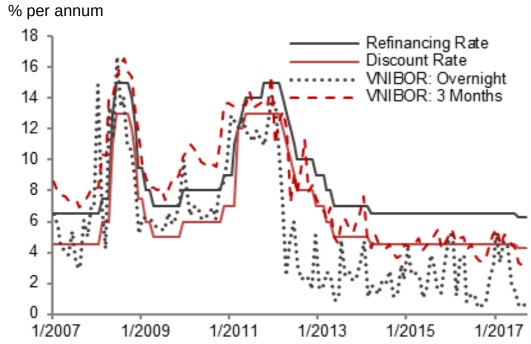
Notes: Fiscal data for 2016 are MOF's 2nd estimate, while data for 2017 are MOF's 1st estimate.
Sources: Ministry of Finance, CEIC, Asian Bonds Online database, and AMRO staff calculations

Figure 1.5. Monetary Sector

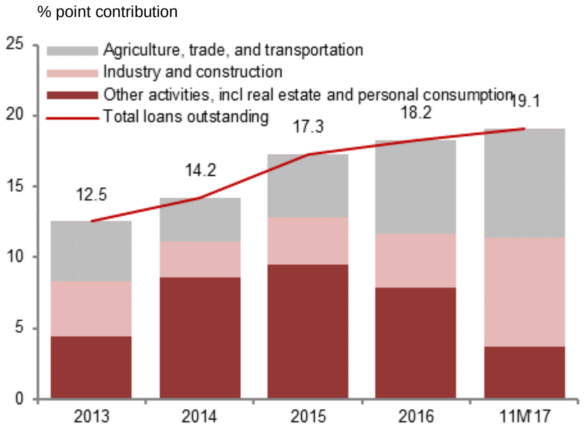
Monetary conditions have remained accommodative.



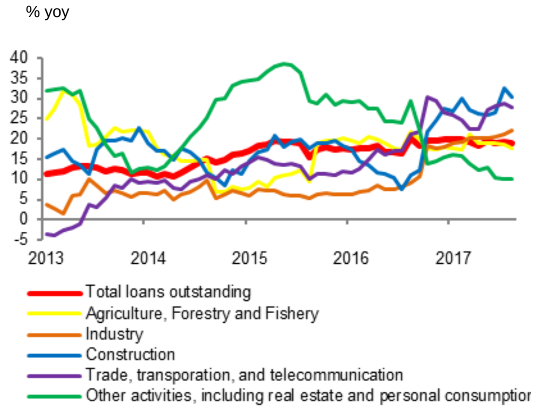
Interbank interest rates have generally moderated, following some pick-up from late 2016.



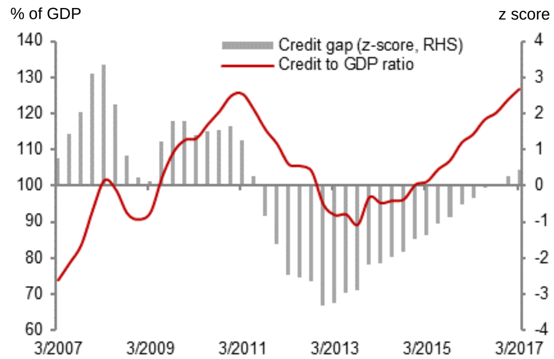
Credit growth has been buoyant and highly supportive of economic activity.



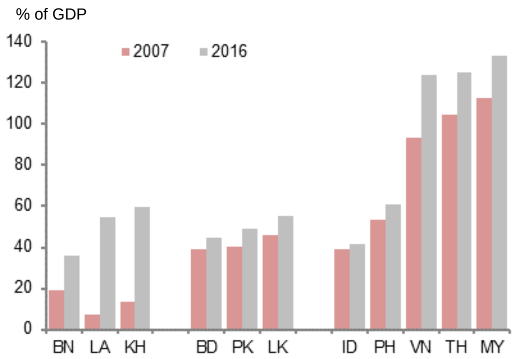
… with bank lending to construction and transportation expanding rapidly.



Credit to GDP ratio has picked up with recent credit expansion,…



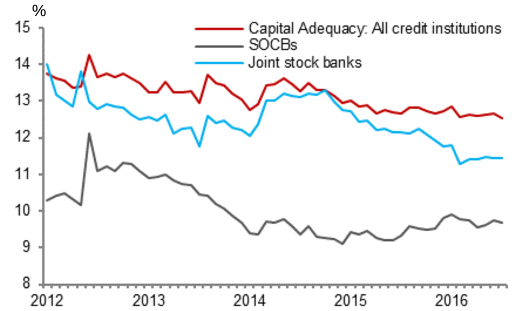
… which has been relatively high in comparison with regional peers.



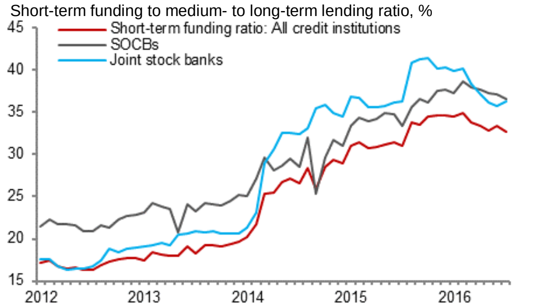
Sources: State Bank of Vietnam, IMF, CEIC, and AMRO staff calculations

Figure 1.6. Financial Sector

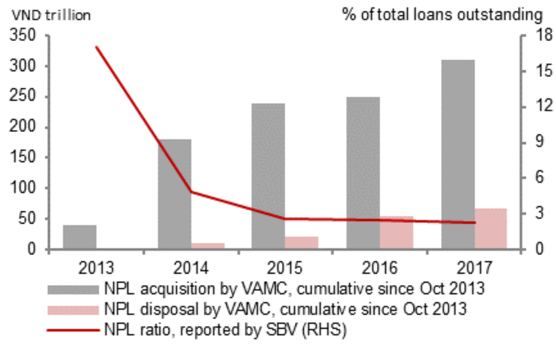
CAR has generally trended down among private banks, while that for SOCBs remains low.



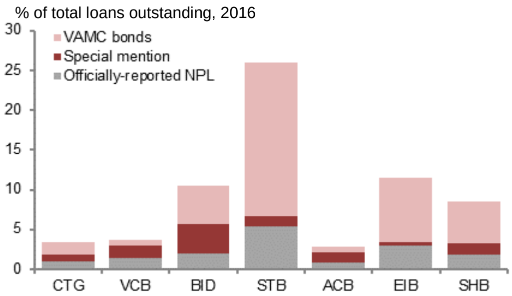
Short-term funding ratio among SOCBs meanwhile remains high.



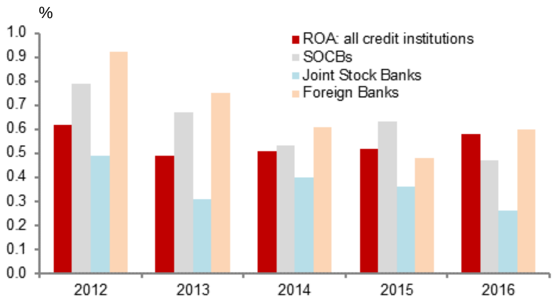
While the official NPL ratio has been contained below 3 percent, the legacy NPL problem remains while the recent pick-up in credit growth coud result in the emergence of new NPLs.



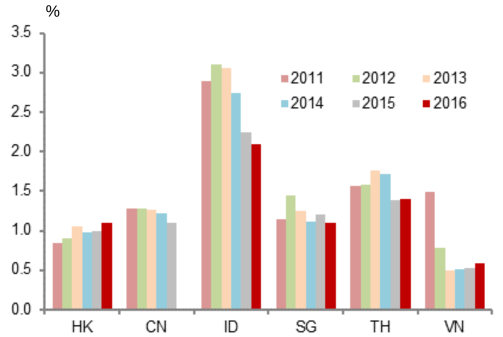
Micro-level data suggest a number of SOCBs and private banks continue to face high levels of impaired loans.



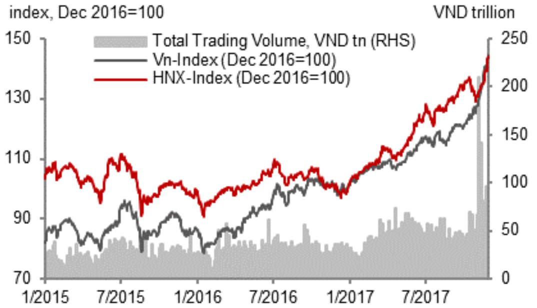
The modest improvement in banks' profitability in 2016 was mainly driven by foreign banks, while SOCBs and JSBs remained in the doldrums.



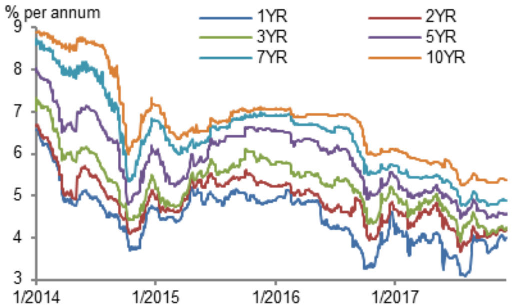
As such, Vietnamese banks' profitabiity remains weak.



The stock market has been on the rise, bolstered by investors' interest in the blue chips.



Government bond yields moderate on back of strengthened demand, amid the government's efforts to lengthen the maturity of bond issuances.



Sources: State Bank of Vietnam, Vietnam Asset Management Corporation, financial reports of listed banks, IMF (FSI database), CEIC, Thomson Reuters Datastream and AMRO staff calculations

Appendix 2. Vietnam's Selected Economic Indicators and Projections: 2012-2018*

	2012	2013	2014	2015	2016	2017	2018
National income and prices	(In annual percentage change, unless otherwise specified)						
Real GDP	5.2	5.4	6.0	6.7	6.2	6.8	6.6
Consumer price inflation (average, RHS)	9.1	6.6	4.1	0.6	2.7	3.5	3.4
Balance of payments	(In billions of U.S. dollars, unless otherwise specified)						
Current account balance	7.9	7.5	8.9	0.9	8.5	6.8	6.3
In percent of GDP	*5.1*	*4.4*	*4.8*	*0.5*	*4.2*	*3.1*	*2.6*
Trade balance	8.8	8.4	11.9	7.4	14.0	11.3	12.2
Service balance	-2.9	-3.1	-3.5	-4.3	-5.1	-3.9	-4.7
Primary income	-6.1	-7.3	-9.1	-9.9	-8.4	-8.9	-9.5
Secondary income	8.2	9.5	9.6	7.7	8.4	8.4	8.4
Financial and capital account balance	8.9	-0.1	5.8	1.6	9.5	16.1	9.1
In percent of GDP	*5.7*	*-0.1*	*3.1*	*0.8*	*4.6*	*7.2*	*3.7*
Direct investment, net	7.2	6.9	8.1	10.7	11.2	17.3	11.0
Porfolio investment, net	2.0	1.5	0.1	-0.1	0.2	1.8	0.8
Medium- and long-term borrowing, net	4.3	3.4	5.6	5.0	2.5	3.1	3.5
Short-term borrowing, net	1.3	0.1	1.0	0.8	-0.6	1.8	1.8
Other investment, net	-5.9	-12.0	-9.0	-14.9	-3.9	-8.0	-8.0
Net errors and omissions	-5.0	-6.8	-6.3	-8.5	-9.6	-8.1	-8.1
Overall balance	11.9	0.6	8.4	-6.0	8.4	14.8	7.4
Gross international reserves	25.4	26.0	34.3	28.3	36.7	51.5	58.9
In months of imports of goods & services	2.6	2.3	2.7	2.0	2.4	2.8	2.8
Coverage of short-term debt by remaining maturity	2.0	2.0	2.3	1.9	2.1	2.7	2.6
	(In annual percentage change, unless otherwise specified)						
Export volume	18.9	18.1	12.5	12.1	11.1	17.6	12.4
Export unit value (in USD)	-0.5	-2.4	1.1	-3.8	-1.8	2.9	1.5
Import volume	7.0	18.8	13.3	18.8	11.1	18.2	13.1
Import unit value (in USD)	-0.3	-2.4	-1.1	-5.8	-5.3	2.6	1.2
Terms of trade	-0.5	-0.1	0.6	2.1	2.7	0.3	0.3
External debt service/exports of goods and services	3.8	4.2	3.4	3.8	3.3	4.0	3.0
Total external debt/GDP	37.4	37.3	38.3	42.0	44.7	49.0	49.3
Short-term/total external debt	21.9	20.0	20.5	18.6	19.2	17.1	18.8
General government	(In percent of GDP)						
Revenue and grants	22.6	23.1	22.3	23.8	24.5	24.8	24.0
Expenditure	29.4	30.5	28.6	30.3	30.1	28.2	27.7
Net lending/borrowing balance	-4.6	-6.8	-6.9	-6.7	-5.6	-3.5	-3.7
Primary net lending/borrowing balance	-3.2	-5.1	-5.1	-4.7	-3.6	-1.5	-2.0
Public debt	50.8	54.5	57.9	61.0	63.6	61.4	61.1
Monetary sector	(In annual percentage change unless otherwise specified)						
Domestic credit	11.1	13.9	15.4	20.2	17.2	17.1	16.3
General government	39.7	25.1	29.6	29.9	6.3	8.2	7.6
Other	8.8	12.7	13.8	18.8	18.8	18.2	17.3
Broad money	24.5	21.4	19.7	14.9	17.9	20.7	16.6
Memorandum items:							
Exchange rate (VND/USD) period avg	20,828	20,933	21,148	21,698	21,932	22,370	22,389
Nominal GDP in billions of USD	155.8	171.2	186.2	193.2	205.3	223.9	246.4
Nominal GDP in trillions of VND	3,245	3,584	3,938	4,193	4,503	5,008	5,517

Note: */ Data from 2012-2017 are actual, with the exception of BOP and monetary sector data for 2017 which are AMRO staff estimates; data for 2018 represent AMRO staff projections.
Sources: National authorities, IMF, World Bank and AMRO staff estimates

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Appendix 3. Vietnam's External Debt Sustainability Framework: 2012-2022*

	Actual							Projections							
	2012	2013	2014	2015	2016			2017	2018	2019	2020	2021	2022		
								I. Baseline Projections							**Debt-stabilizing non-interest current account 6/**
External debt	37.4	37.3	38.3	42.0	44.7			**49.0**	**49.3**	**50.6**	**50.1**	**49.8**	**49.5**		**-5.8**
Change in external debt	-4.1	-0.1	1.0	3.7	2.7			4.3	0.3	1.3	-0.4	-0.3	-0.3	0.0	
Identified external debt-creating flows (4+8+9)	-16.0	-11.2	-11.7	-6.7	-12.0			-15.3	-11.7	-10.7	-10.4	-10.3	-10.3	0.0	
Current account deficit, excluding interest payments	-6.9	-5.2	-5.8	-1.3	-4.9			-4.1	-3.6	-3.6	-4.0	-4.4	-4.5	5.8	
Deficit in balance of goods and services	-4.8	-3.3	-4.6	-1.6	-4.2			-3.3	-3.0	-3.0	-3.4	-3.6	-3.7		
Exports	79.8	83.4	86.6	89.6	92.0			101.4	104.8	106.9	108.2	109.7	110.6		
Imports	75.0	80.1	81.9	88.0	87.8			98.1	101.8	103.9	104.8	106.0	106.9		
Net non-debt creating capital inflows (negative)	-4.5	-3.3	-3.6	-4.8	-5.6			-8.5	-4.8	-3.9	-3.2	-2.9	-2.9	-2.9	
Automatic debt dynamics 1/	-4.6	-2.6	-2.2	-0.5	-1.6			-2.7	-3.3	-3.2	-3.2	-3.0	-2.9	-2.9	
Contribution from nominal interest rate	0.8	0.7	0.8	0.9	0.9			1.0	1.2	1.2	1.4	1.5	1.5	1.5	
Contribution from real GDP growth	-1.9	-1.8	-2.1	-2.5	-2.5			-2.8	-2.9	-2.9	-3.0	-3.0	-3.0	-2.9	
Contribution from price and exchange rate changes 2/	-3.5	-1.5	-0.9	1.1	0.0			-0.9	-1.5	-1.5	-1.6	-1.5	-1.5	-1.5	
Residual, incl. change in gross foreign assets (2-3)	11.9	11.1	12.7	10.4	14.8			19.6	12.0	12.0	10.0	10.0	10.0	0.0	
External debt-to-exports ratio (in percent)	46.9	44.7	44.2	46.8	48.6			48.3	47.0	47.3	46.3	45.5	44.8		
Gross external financing need (in billions of US dollars) 3/	4.8	9.3	6.9	17.6	8.3			11.3	11.9	13.1	12.2	11.4	11.0		
in percent of GDP	3.1	5.4	3.7	9.1	4.0			5.0	4.8	4.8	4.1	3.5	3.1		
Key Macroeconomic Assumptions						10-Year Historical Average	10-Year Standard Deviation							For debt stabilization	Projected Average
Real GDP growth (in percent)	5.2	5.4	6.0	6.7	6.2	6.0	0.6	6.8	6.6	6.5	6.5	6.5	6.5	6.5	6.5
Exchange rate appreciation (US dollar value of local currency, change in percer	-1.5	-0.5	-1.0	-2.5	-1.1	-3.1	3.2	-1.9	-0.1	-0.2	-0.2	-0.3	-0.3	-0.3	-0.2
GDP deflator in US dollars (change in percent)	9.2	4.2	2.6	-2.7	0.0	5.8	6.9	2.1	3.3	3.2	3.2	3.1	3.1	3.1	3.2
Nominal external interest rate (in percent)	2.2	2.1	2.2	2.4	2.2	2.4	0.3	2.5	2.7	2.7	3.0	3.2	3.4	3.4	3.0
Growth of exports (US dollar terms, in percent)	17.5	14.8	12.9	7.5	9.0	16.1	12.3	20.2	13.8	12.1	11.2	11.3	10.8		11.8
Growth of imports (US dollar terms, in percent)	7.0	17.3	11.3	11.6	5.9	15.0	13.9	21.8	14.2	12.1	10.9	11.1	10.7		11.8
Current account balance, excluding interest payments	6.9	5.2	5.8	1.3	4.9	-0.2	6.2	4.1	3.6	3.6	4.0	4.4	4.5		4.0
Net non-debt creating capital inflows	4.5	3.3	3.6	4.8	5.6	6.3	3.7	8.5	4.8	3.9	3.2	2.9	2.9		3.5
								II. Stress Tests for External Debt Ratio							**Debt-stabilizing non-interest current account 6/**
A. Alternative Scenarios															
A1. Key variables are at their historical averages in 2017-2022 4/								49.0	50.4	51.4	50.2	48.9	47.6		-10.5
B. Bound Tests															
B1. Nominal interest rate is at baseline plus one-half standard deviation								49.0	49.4	50.7	50.4	50.1	49.9		-5.7
B2. Real GDP growth is at baseline minus one-half standard deviations								49.0	49.4	50.9	50.6	50.5	50.4		-5.8
B3. Non-interest current account is at baseline minus one-half standard deviations								49.0	52.4	56.6	58.9	61.2	63.3		-6.6
B4. Combination of B1-B3 using 1/4 standard deviation shocks								49.0	51.0	53.8	54.9	56.0	57.1		-6.1
B5. One time 30 percent real depreciation in 2018								49.0	73.9	75.8	75.1	74.7	74.3		-8.7

1/ Derived as [r - g - r(1+g) + ea(1+r)]/(1+g+r+gr) times previous period debt stock, with r = nominal effective interest rate on external debt; r = change in domestic GDP deflator in US dollar terms, g = real GDP growth rate, e = nominal appreciation (increase in dollar value of domestic currency), and a = share of domestic-currency denominated debt in total external debt.

2/ The contribution from price and exchange rate changes is defined as [-r(1+g) + ea(1+r)]/(1+g+r+gr) times previous period debt stock. r increases with an appreciating domestic currency (e > 0) and rising inflation (based on GDP deflator).

3/ Defined as current account deficit, plus amortization on medium- and long-term debt, plus short-term debt at end of previous period.

4/ The key variables include real GDP growth; nominal interest rate; dollar deflator growth; and both non-interest current account and non-debt inflows in percent of GDP.

5/ The implied change in other key variables under this scenario is discussed in the text.

6/ Long-run, constant balance that stabilizes the debt ratio assuming that key variables (real GDP growth, nominal interest rate, dollar deflator growth, and non-debt inflows in percent of GDP) remain at their levels of the last projection year.

Note: */ For the purpose of this exercise, AMRO staff has adopted the IMF's template for External Debt Sustainability Analysis template.
Sources: IMF, CEIC, and AMRO staff estimates.

Appendix 4. Data Adequacy for Surveillance Purposes: Preliminary Assessment

Surveillance Areas	Data Availability(i)	Reporting Frequency/ Timeliness(ii)	Data Quality(iii)	Consistency(iv)	Others, if Any(v)
National Accounts and Inflation	Yearly GDP data are available for both the expenditure and production approaches. Quarterly GDP data by expenditure, however, have not been made available. Core CPI inflation data have been released since 2015. CPI data have been rebased to 2014 [previous base year: 2009] with a new CPI basket weight system based on 2014 consumption.	Estimated GDP data are released within the final week of each quarter; while revised data are usually released by the end of the following quarter.	High-frequency data, such as industrial production and retail sales indices, are not seasonally adjusted and are sometimes in nominal terms only.	Historical GDP data using the new base of 2010 have not been made available, making the comparison across time difficult.	-
Balance of Payments and External Position	-	Quarterly balance of payments data have been released at the SBV website with a time lag ranging from one to two quarters.	Persistent net errors and omissions make the analysis and interpretation of the data difficult.	-	-
State Budget and Government/ External Debt	Quarterly state budget data are available. Data on State-owned-enterprise (SOE) debt are seldom available.	The latest Debt Bulletin, which was released in August 2017, reported debt data up to 2015.	Certain government borrowings are excluded from the budget data. Public debt cover central government debt, local government debt, and central government guaranteed debt only. SOE debt is excluded from the public debt statistics.	Budget data have been based on Vietnamese accounting standards which differ from the Government Finance Statistics (GFS) standards.	The newly-revised State Budget Law has made the reporting of budget data more in line with international standards, effective January 2017.
Money Supply and Credit Growth	Domestic credit data by currency domination, i.e. LCY and FCY, have yet to be made available.	Monthly data have been released at the SBV website with a time lag of two to four months.	-	-	-
Financial Sector Soundness Indicators	-	Monthly data have been released at the SBV website with a time lag of two to six months.	-	The implementation of a new loan classification (in accordance with SBV Circular 02 dated 2013) has enhanced the consistency of NPL data since mid-2016.	Officially-reported NPL data may not capture the full picture of NPL in the banking sector. A reference with NPL acquisition and disposition at the Vietnam Asset Management Corporation is hence useful.
SOE Statistics	SOE statistics have yet to be made available on a frequent basis.	-	-	-	-

Notes: (i) Data availability refers to whether the official data are available for public access by any means, (ii) Reporting frequency refers to the periodicity that the available data are published. Timeliness refers to how up-to-date the published data are relative to the publication date, (iii) Data quality refers to the accuracy and reliability of the available data given the data methodologies, (iv) Consistency refers to both internal consistency within the data series itself and its horizontal consistency with other data series of either same or different categories, and (v) Other criteria might also apply, if relevant. Examples include, but are not limited to, potential areas of improvement for data adequacy.
Source: AMRO Staff Compilation