TIMOR-LESTE ECONOMIC REPORT

OCTOBER 2018

REGAINING MOMENTUM?

WORLD BANK GROUP

TIMOR-LESTE ECONOMIC REPORT
OCTOBER 2018

REGAINING MOMENTUM?

WORLD BANK GROUP

KEY INDICATORS (2017)	
Population, million	1.3
GDP, current US$ billion[a]	1.6
GDP per capita, current US$[a]	1,249
Poverty headcount ratio – national poverty line (% population)[b]	41.8
Poverty headcount ratio – $1.90 a day (2011 PPP, % population) [b]	30.3
Poverty headcount ratio – $3.20 a day (2011 PPP, % population)[b]	73.2
GINI index[b]	28.7

Sources: World Development Indicators and World Bank staff estimates
Notes: (a) Excluding offshore petroleum production, (b) most recent value (2014)

ACKNOWLEDGEMENTS

SUMMARY

RECENT DEVELOPMENTS

- Early parliamentary elections in May delivered an absolute majority for the Alliance for Change and Progress (AMP) coalition. The election marked the end of a year-long political stalemate that led to a sharp decline in public spending and weakened economic activity.
- Government expenditure fell by 27 percent in 2017 and remained significantly constrained in 2018. GDP is estimated to have contracted by 4.7 percent in 2017 and is expected to be subdued in 2018. Construction, commerce and public services are likely the most affected sectors.
- Consumer price inflation is relatively low at 2.6 percent, while the real exchange rate remains fairly stable – although it is thought to be overvalued. Credit to the private sector grew strongly in late 2017 – possibly acting as a substitute for government payments – but slowed dramatically by mid-2018.
- The current account improved in 2017, as petroleum income increased and imports declined. With petroleum production expected to cease by 2023, Petroleum Fund withdrawals will be required to finance a large current account deficit – 44 percent of GDP when excluding JPDA income – as well as a large fiscal deficit – 62 percent of GDP when considering domestic revenues only.
- The government recently signed a deal to buy ConocoPhillips' 30 percent stake in the Greater Sunrise Joint Venture, underscoring its commitment to the Tasi Mane project in the South Coast.

OUTLOOK AND RISKS

- The economic outlook for 2018 remains uncertain, partly hinging on the execution of the 2018 budget. Economic growth is expected to recover by 2019 underpinned by stronger investments and renewed consumer and business confidence. Approval of the 2019 budget is of critical importance.
- Fiscal sustainability and the quality of public spending remain a key concern. Limiting excess withdrawals from the Petroleum Fund and improving domestic resource mobilisation could simultaneously support fiscal sustainability, spending efficiency and accountability. Prioritising capital spending and moderating recurrent expenditures could also lead to better value-for-money.
- The domestic political situation may pose the greatest risk to the economy going forward. A stable coalition is a prerequisite for a smooth and effectual implementation of the government program, while a constructive relationship between the President, the parliament and the government is also vital to ensure political and economic stability.

SPECIAL FOCUS

- Construction and public services have been the key drivers of economic performance since independence, partly as an effort to re-build infrastructure, strengthen public institutions, and enhance service delivery. However, a more sustainable growth path is needed, while enhancing overall productivity in the medium-term requires improved outcomes in health, nutrition and education. The expansion of productive sectors – such as commercial agriculture, labour-intensive manufacturing, and tourism – is crucial to diversify the economy and achieve sustainable and inclusive growth. Encouraging investments in dynamic sectors with strong potential for employment generation and productivity growth is key to seize a demographic dividend and sustainably raise living standards.
- Improved education and skills can facilitate structural change and boost productivity growth. Educational attainment is low – at 4.5 years of schooling – but has improved rapidly in recent years, especially for the younger cohorts. This has been mainly achieved through higher enrolment rates. However, repetition rates and school dropouts are high, while recent assessments suggest that student learning is low – which significantly limits human and economic development. Expanding pre-school education, upgrading school infrastructure, developing teacher competences, and improving the governance of the education system are key priorities to improve outcomes.

CONTENTS

LIST OF FIGURES

LIST OF TABLES

PART 1.
RECENT ECONOMIC DEVELOPMENTS

REAL SECTOR

A sharp decline in government spending weakened economic activity in 2017 and is also affecting 2018. The public sector has a large weight in the economy – accounting for over half of total domestic expenditure – which implies that fiscal dynamics can have a considerable impact on domestic activity (Figure 1). A political stalemate severely constrained total government spending in 2017, mainly affecting capital investments. As a result, GDP is estimated to have contracted by 4.7 percent, although resilient private consumption and lower imports likely averted a larger fall (Figure 2).[1] Private consumption was buoyed by wage growth and social transfer programs, which were critical for sustaining household incomes.[2] Trends in commercial bank credit and foreign investment suggest that private investment was also resilient in 2017, despite the political and economic uncertainty. Imports declined by 7 percent, owing to lower demand for goods and services linked to public infrastructure projects. To some extent, this 'leakage' channel explains why the overall economic contraction was not more pronounced in response to striking public spending shortfalls. Exports – excluding offshore petroleum and re-exports – are small and mainly composed of coffee and travel services.[3] Public spending remained subdued in the first half of 2018, before a new (majority) government was formed in June and a budget for the remainder of the year was approved in September. Proxy indicators provide mixed signals when compared to their levels in the first half of 2017. Merchandise trade (including imports of cement and machinery), foreigner arrivals and vehicle registrations were lower, while electricity consumption, traffic at Dili international airport and bank credit increased – albeit at a slower pace.[4] While these are only imperfect proxies – susceptible to idiosyncratic events – they broadly suggest that recent economic activity remains weak in 2018.

---

[1] Official national accounts data for 2017 will only be available in late 2018 or early 2019. All values are World Bank staff estimates. In this report, GDP excludes production activity in the Joint Petroleum Development Area (JPDA).

[2] Civil service salary scales were revised in early 2017, while private sector wages grew by an average of 10 percent between January 2016 and October 2017 (Enterprise Skill Survey 2017, SEJT). Personal benefit transfers were broadly unchanged in 2017. These predominately comprised veteran pensions, in addition to other pensions (ex-politicians, elderly and disabled) and Bolsa da Mae. Moreover, low consumer price inflation avoided the erosion of purchasing power.

[3] In this report, 'petroleum' refers to both oil and gas. Re-exports are exports of foreign goods in the same state as previously imported (i.e. have not undergone further processing, or changed in form or condition), which can sometimes be of a significant value (e.g. machinery, vehicles, etc.).

[4] International air traffic includes flights, passengers and cargo. Cargo departures have decreased (in Kg), but this is unlikely to be related to exports.

Figure 1: Expenditure composition (% GDP)

Source: MoF-DGE, and World Bank staff estimates for 2017.

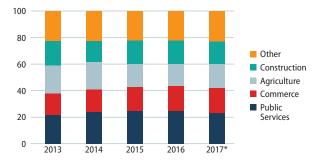**Figure 2: Contribution to GDP growth (%)**

Source: MoF-DGE, and World Bank staff estimates for 2017.

Construction, commerce and public services are likely the most affected sectors by the economic downturn.
Public services account for a significant share of gross value added (GVA) – about one-quarter – followed by agriculture, construction, and commerce (Figure 3).[5] In 2017, several of these sectors experienced declines in activity levels (Figure 4). Lower government investment impacted negatively on construction through delays in the implementation of large infrastructure projects. Although bank credit to the sector grew in late 2017, this was possibly due to companies trying to offset government payment delays. Lower public recurrent spending also impacted on services, such as commerce, through lower purchases of goods and services. Public services were certainly affected, as the fiscal data suggests. Agriculture also had a weak performance, as many crops (including coffee) were affected by poor weather conditions. The construction of the Tibar Bay Port started in September 2018, which might provide a boost to the construction sector in coming years.

Figure 3: Sectoral composition (% GVA)

Source: MoF-DGE, and World Bank staff estimates for 2017.

Figure 4: Contribution to GVA growth (%)

Source: MoF-DGE, and World Bank staff estimates for 2017.
Note: Estimates are uncertain due to lack of good proxies.

---

[5] In this report, 'public services' refers to public administration & defence, education, health, and social work activities – which are mostly (but not exclusively) provided by the public sector – while 'commerce' comprises wholesale & retail trade, transportation & storage, and accommodation & food services. Official data sources do not enable a disaggregation of these sectors.

MEASURING ECONOMIC ACTIVITY

Total gross domestic product (GDP), which includes offshore petroleum production, is an imperfect proxy for domestic economic activity in Timor-Leste. The nominal value of petroleum production is extremely volatile – driven by unstable international prices – and significantly affects total GDP, making it difficult to disentangle domestic economic developments from petroleum sector trends. In fact, using total GDP in economic monitoring and analysis can be misleading since it affects all ratios of GDP. Moreover, there are few direct links between the petroleum sector and the rest of the economy, as all production is outsourced to foreign companies. To provide a clearer assessment of recent trends, this report uses a GDP measure that excludes offshore petroleum production. In fact, it can be argued that the latter is better reflected as petroleum receipts (e.g. royalties) rather than domestic production. In that case, the two main transmission channels to the domestic economy are fiscal revenues and primary income (Balance of Payments). Petroleum revenues are deposited in an offshore sovereign wealth fund (Petroleum Fund), which upon parliamentary approval can be transferred to the state budget. Moreover, hard-currency petroleum receipts can finance a larger trade deficit. These issues will be considered when looking at fiscal and external trends. Gross national income (GNI) is also highly volatile, due to the inclusion of income from the Joint Petroleum Development Area (JPDA) and Petroleum Fund investment returns.
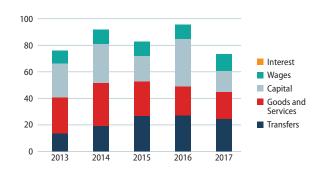
FISCAL SECTOR

Government expenditure fell by 27 percent in 2017 and remains significantly constrained in 2018.[6] The large decline in public spending was caused by a combination of factors. The 2017 budget was 11 percent lower than that of the previous year – in anticipation of mid-year elections – while the ensuing (minority) government was unable to pass a budget rectification. With a scarce resource envelope – and under significant political uncertainty – public expenditure was severely constrained (Figure 5). Capital spending declined by 57 percent in 2017 as major projects were delayed – spending on roads was over $90 million lower than in the preceding year. Capital spending typically rises in the last quarter of the year, but this was not the case in 2017 – even excluding one-off payments (Figure 6)).[7] Spending on goods & services and public transfers both fell by about 13 percent, although expenditure on wages & salaries increased (by more than 10 percent) as civil service salary scales were revised for the first time in several years. With new elections called for mid-2018 and in the absence of a state budget, the law provided for a duodecimo regime – allowing monthly appropriations of 1/12th of the previous 2017 budget. Unable to access regular Petroleum Fund resources, government spending in 2018 remained subdued.[8] In the first half of 2018, recurrent expenditure was about one-third lower than in the previous year, mostly due to public transfers (reduced by nearly 60 percent owing to 'public grants') but also goods & services (lower by 13 percent). Capital expenditures were 27 percent higher, but most spending on this category tends to occur predominantly in the last quarter of the year.

---

[6] Total government spending includes development grants – as per the Budget Book 1.

[7] In November 2016, a payment of $129.5 million was made to an escrow account in contribution to the construction phase of the Tibar Bay Port (Viability Gap Funding for PPP concessionaire).
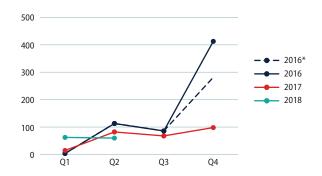
[8] The Petroleum Fund is a Sovereign Wealth Fund, operationally managed by the central bank, that receives all petroleum revenues. Transfers to the central government require parliamentary approval, usually through the yearly state budget proposal.

Figure 5: Total expenditure (% GDP)

Source: MoF-DNPE
Notes: GDP declined in 2017, making the spending shortfall appear less pronounced.

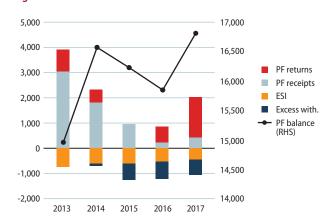**Figure 6: Capital expenditure (USD millions)**

Source: MoF-DNPE
Note: The dashed line excludes a $129.5 million payment to an escrow account regarding the VGF of Tibar Bay Port PPP.

General public services and economic affairs were the most affected functions. Total expenditure on general public services declined by 49 percent in 2017, while defence and public order & safety also recorded significant shortfalls (Quarterly Statistical Indicators 2017Q4, DGE). Economic affairs had the second largest drop at 44 percent, and social sectors were also considerably affected – such as education (33 percent) and health (22 percent). These reductions affected recurrent spending, especially purchases of goods & services, as well as planned capital investments. Therefore, this notable fall in public spending is likely to have affected public service delivery.

Petroleum revenues increased in 2017, due to large Petroleum Fund investment returns, but are moderating in 2018. Petroleum revenues include both petroleum receipts and investment returns from the Petroleum Fund. Receipts mainly comprise income taxes, royalties and profits, which are linked to offshore petroleum production. Investment returns are accrued from Petroleum Fund assets – 60 percent of which are allocated to fixed-income products (mostly US bonds) and 40 percent to international equities. Petroleum receipts have declined steeply since 2012 – because of declining production levels – but a bullish global equity market in 2017 led to a considerable rise in Petroleum Fund investment returns, with a rate of return above 10 percent (Figure 7).[9] Nonetheless, petroleum revenues were considerably lower in the first half of 2018, due to a sharp fall in Petroleum Fund returns – as stock markets moderated. Petroleum revenues far exceed more traditional sources of government revenue.
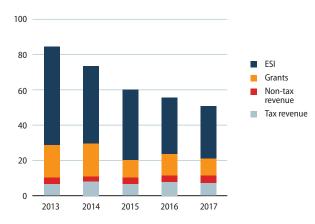
Figure 7: Petroleum Fund

Source: MoF-DNPE
Notes: Petroleum tax repayments (of over-collected taxes from operators in 2015) were mostly processed in 2016.

Figure 8: Domestic revenue and ESI (% GDP)

Source: MoF-DNPE

---

[9] However, it should be noted that these are unrealised gains relating to the revaluation of marketable securities.

The Estimated Sustainable Income is gradually declining, while domestic revenues remain small. Petroleum revenues are regulated by the Petroleum Fund law and are not automatically available to the government – since any transfer from the Petroleum Fund requires parliamentary approval. The Petroleum Fund law provides for an Estimated Sustainable Income (ESI), which is set at 3 percent of total petroleum wealth – i.e. the current Petroleum Fund balance plus the net present value of anticipated future petroleum revenues – reflecting the annual amount that can be sustainably withdrawn from the Petroleum Fund for budget financing. However, the ESI is often seen as merely indicative rather than a binding fiscal rule. The Estimated Sustainable Income (ESI) has been gradually declining, although it will increase in 2018 due to a strong performance of the Petroleum Fund in the previous year (Figure 8). Domestic revenues (including tax and non-tax revenues) only account for a small share of the overall resource envelope, and less than 12 percent of GDP. Tax revenues declined by about 8 percent in 2017, mainly due to lower withholding tax receipts from public infrastructure projects. Personal income and corporate taxes also declined. Overall, domestic resource mobilisation has been relatively weak, especially as the political situation stalled the implementation of critical fiscal reforms. Development grants have also declined through the years. In the first half of 2018, domestic revenues were down by 17 percent (year-on-year), mainly because of lower tax revenues linked to public spending.

The overall balance improved due to a 'forced' fiscal consolidation. Unanticipated petroleum revenues did not prevent a severely contractionary fiscal stance due to a political deadlock in parliament. As a result, the fiscal deficit improved in 2017 (Figure 9). The deficit was predominantly financed by excess Petroleum Fund withdrawals – above the ESI and approved thorough the 2017 budget – and use of cash balances (Figure 10).[10] The fiscal deficit rises from 32 to 62 percent of GDP if only domestic revenues are considered – i.e. excluding all Petroleum Fund withdrawals. Cash reserves were precariously low in 2018, and two emergency Petroleum Fund withdrawals were critical to ensure the basic functioning of the state.[11] This partly reflects underdeveloped domestic financing sources, such as treasury bills and bond issuance. Although the public debt stock is low due to limited debt financing of the budget, it has increased in recent years – to about 7 percent of GDP in 2017. Debt servicing, which comprises both interest payments and debt amortisation, is negligible but expected to grow in the near term. The country is currently at a moderate risk of debt distress (Debt Sustainability Analysis 2017, IMF-World Bank).

Figure 9: Fiscal balance (% GDP)

Source: MoF-DNPE.
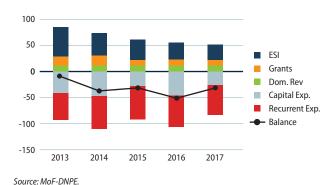
Figure 10: Deficit financing (% GDP)

Source: MoF-DNPE

---

[10] The ESI budget balance provides a better measure of medium-term fiscal sustainability, especially when compared to the alternatives – i.e. excluding or including all petroleum revenues. The 2017 budget included both the ESI and excess Petroleum Fund withdrawals as (deficit) financing, while the 2018 budget included the ESI under fiscal revenues.

[11] The central bank (BCTL) transferred $70m to the state budget in May 2018 (under the VII constitutional government), while a $140m withdrawal from the Petroleum Fund was approved by parliament and promulgated by the President in August 2018 (under the VIII constitutional government).

MONETARY AND FINANCIAL SECTOR

Consumer price inflation increased in 2018 due to a combination of food, tobacco and education prices. Relatively low international food and oil prices, coupled with a strong US dollar, have helped keep inflation low in recent years. In fact, inflation has been well below the Strategic Development Plan's target range – 4 to 6 percent per year – and the economy even experienced a deflationary period in 2016 (Figure 11). Inflation, as measured by the consumer price index (CPI), increased to 2.6 percent in the second quarter of 2018 – continuing the trend from the beginning of the year. Food & non-alcoholic beverages have a large weight in the consumption basket, meaning that changes in these prices can have a significant effect on headline inflation. Food prices have increased in the first half of 2018 (year-on-year), especially owing to rice.[12] Since a high proportion of food consumed in the country is imported, international food prices and exchange rates can have a strong impact on domestic inflation. Education costs increased by almost 17 percent, while alcohol & tobacco increased by 9 percent in the second quarter – mainly owing to tobacco. Oil prices can also affect consumption through imports of processed petroleum products and indirectly affect other prices. Transport prices also increased but has a relatively small weight in the overall consumption basket.

Figure 11: Contribution to inflation (year-on-year, %)

Source: BCTL
Note: Values may not add up to the total due to rounding.

Figure 12: Contribution REER changes (year-on-year, %)

Source: BCTL
Note: An increase indicates an appreciation.

The real exchange rate remained relatively stable, as neither inflation nor the US dollar created appreciation pressures. The nominal effective exchange rate (NEER) contributed to a significant appreciation of its real counterpart (REER) in 2015, as the US dollar strengthened against many of Timor-Leste's trading partners (Figure 12).[13] Appreciation pressures have eased since then, with the REER experiencing a slight depreciation trend – partly due to inflation differentials. However, the REER appreciated in the second quarter of 2018 due to a stronger US dollar. An overvalued exchange rate enables cheaper imports but undermines export competitiveness in international markets.[14] Key products for Timor-Leste – such as petroleum and coffee – are traded in US dollars in international markets, which shields them from these pressures. Nonetheless, products with export potential and local products competing with imported goods will struggle – such as food crops and regional tourism. The current exchange rate regime has contributed to a stable macroeconomic environment, but the policy will need regular monitoring to ensure it remains appropriate in the medium-term.

---

[12] International rice prices increased in May 2018 (Pink Sheet June 2018, World Bank).

[13] An 'effective' exchange rate is a trade-weighted average of bilateral exchange rates.

[14] The 2017 IMF Article IV suggests an overvaluation of between 27 and 44 percent. In the calculation of the REER, the CPI is used to proxy for domestic production costs – in the absence of a producer price index (PPI) or unit labour costs (ULC). However, this may not adequately reflect the external competitiveness of domestic products.

Credit to the private sector slowed dramatically in 2018, mainly as individuals borrowed less. Excluding individuals, domestic credit has been largely allocated to construction and trade & finance, with tourism and industry lagging significantly behind (Figure 13). Less than one percent was allocated to agriculture, while commercial credit to the central government and state-owned enterprises is negligible. Private sector credit growth (year-on-year) was slightly negative in 2016, increased throughout 2017, and then stalled in the first half of 2018 (Figure 14). A possible explanation is that credit may have acted as a temporary substitute for government payments in 2017, thus being at odds with the GDP trend. The fiscal contraction had a notable impact on the construction sector, which was the main driver of credit growth in the second half of 2017.[15] Political and economic uncertainty probably led to more containment from individuals in 2018, while trade & finance and industry averted a sharper decline in credit growth. Despite a strong decline in non-performing loans – from 15 percent of total loans in June 2017 to 5 percent in June 2018 – access to credit remains a key challenge for the private sector (Economic Bulletin June 2018, BCTL). The interest rate spread is high, with deposit rates hedging even closer to zero and lending rates hovering around 13 percent. The credit-to-GDP ratio remains low – below 15 percent – while a declining loan-to-deposit ratio (pointing to high liquidity in the banking sector) suggests that financial intermediation is weak. The government program envisages the establishment of a state-owned development bank (BDTL) to improve access to credit – as does the Strategic Development Plan (SDP) for 2011-2030.
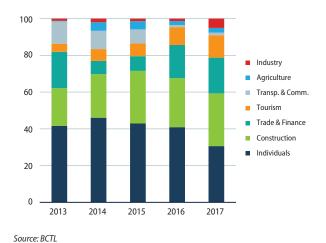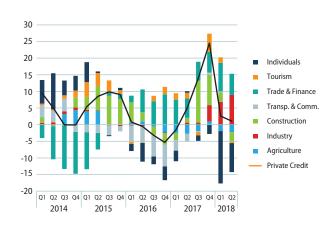
Figure 13: Credit to private sector (%)

Source: BCTL

Figure 14: Private credit growth (year-on-year, %)

Source: BCTL

EXTERNAL SECTOR

The current account improved in 2017, as JPDA income increased and imports declined. Imports of goods & services dropped considerably and exports increased from a low base, leading to an improvement of the trade balance – albeit still in a large deficit.[16] Constrained public capital spending contributed to lower import demand, such as construction services.[17] Merchandise imports are mostly sourced from ASEAN member states, namely Indonesia. Domestic exports are almost exclusively composed of coffee and travel services. Coffee exports declined significantly in 2017 – as adverse weather affected production levels – but this was more than offset by travel services. Petroleum receipts are recorded as primary income in Balance of Payments statistics, rather than exports. Primary income increased for the first time since 2012, mainly because of higher income originating from the Joint Petroleum Development Area (JPDA).[18] Income from JPDA has typically offset large trade deficits, contributing to sizeable

---

[15]Expenditure arrears can significantly disrupt the cash flow of the private sector, especially in sectors predominantly driven by public contracts.

[16] Trade statistics may vary between national data sources. To ensure consistency, MoF-DGE data is used for the national accounts (real sector), while BCTL data is used for the balance of payments (external sector).

[17] Merchandise imports are mainly comprised of consumer and capital goods. Imports of raw materials and intermediate goods is low due to limited industrial capabilities.

[18] Primary income comprises compensation of employees (very small), investment income, and 'other primary income (JPDA)'.

current account surpluses up until 2014 (Figure 15). However, petroleum production has decreased through time and is expected to cease by 2023, while the recent upswing in international oil prices (since mid-2017) will only provide a temporary income boost. Investment income, mainly interest on Petroleum Fund investments abroad, has been flat since 2014. The current account deficit becomes much higher when excluding JPDA income (changing from 18 to 44 percent of GDP), which highlights the unsustainable nature of the current trade pattern. Secondary income – comprising both private and public transfers – has turned negative for the first time in more than a decade.

Figure 15: Current account balance (% GDP)

Source: BCTL
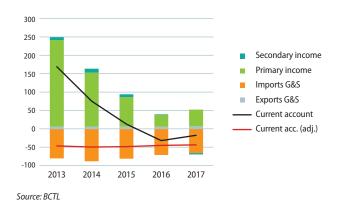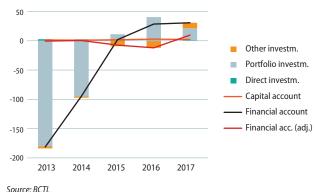Notes: Adjusted value exclude JPDA income

Figure 16: Financial account balance (% GDP)

Source: BCTL
Note: Adjusted values exclude PF investments abroad.

The financial account strengthened marginally, benefiting from positive 'other investments'. Portfolio investment – comprising equity and debt securities and largely pertaining to Petroleum Fund investments abroad – remains the largest component of the financial account, even if it has dwindled through time as large outflows turned into inflows (Figure 16). This Petroleum Fund divestment largely financed the current account deficit over the past three years – as well as the fiscal deficit. Other investments – usually comprising currency and deposits, as well as loans – were positive in 2017. Foreign direct investment is relatively small and has declined in recent years. A coherent investment policy, a proactive investment promotion strategy and an enhanced business environment could help attract (foreign) investors in key economic sectors. When excluding Petroleum Fund investments abroad, the financial account becomes smaller but is still positive and showing an improvement. The capital account is almost negligible, usually comprising transfers of asset ownership. Given a positive overall balance of payments position, reserve assets increased by $263 million in 2017 – though these gains were cancelled out in the first half of 2018. Gross external debt grew to $235m by mid-2018, mainly owing to rising long-term government liabilities and short-term bank liabilities (to a smaller extent).

PART 2.
OUTLOOK AND RISKS

The economic outlook for 2018 remains uncertain, partly hinging on the execution of the state budget. Economic activity was sluggish in the first half of 2018 – as inferred by lacklustre public spending, weakened trade levels, and slower credit growth. The recently approved 2018 budget proposes a substantial expenditure increase in the last four months of the year – to offset 18 months of constrained spending.[19] This presents a significant challenge for the public sector and budget execution rates may be lower than usual – due to the limited time to spend funds. Moreover, a proportion of the 2018 budget will be used to settle previous financial commitments for activities already undertaken – expenditure arrears – rather than create new economic activity.[20] Overall, it is unlikely that this expansionary fiscal stance will considerably influence domestic economic activity in the short-term. GDP is forecast to grow by 0.8 percent in 2018 – under a fairly positive scenario for budget execution. Political uncertainty affected consumer and business confidence until recently, but private investment may pick up in late 2018. The construction sector is set to recover – partly through the Tibar Bay Port – as well as agriculture if weather conditions are favourable. The broader implications of two consecutive years of disappointing economic performance are yet to be gauged – such as the impact on employment levels and earnings, labour productivity, and household incomes.

In the medium-term, economic growth is expected to recover by 2019. The new government program presents an ambitious agenda for 2018-2023. Expenditures are expected to increase in 2019 and moderate in 2020 due to the expected conclusion of key capital projects – mostly relating to roads. Nonetheless, new projects might be brought into the pipeline, especially if the policy of frontloading strategic capital investments continues. Growth is forecast to accelerate to 3.3 percent in 2019 and 4.9 percent in 2020. This rebound would be underpinned by stronger public and foreign investments, as well as renewed consumer and business confidence – which would also support credit growth. Inflation is expected to remain below the SDP target, even if it is usually driven by (erratic) international food prices and exchange rates. As JPDA income gradually declines, the current account balance will deteriorate further and will have to be financed by additional Petroleum Fund divestments.

Fiscal sustainability and the quality of public spending remain a key concern. Offshore petroleum production from the remaining field (Bayu-Undan) is expected to cease by 2023. Even if oil prices continue to increase, petroleum receipts are unlikely to pick up significantly. Despite the recent signing of the maritime boundary treaty – which is yet

---

[19] Nonetheless, the overall 2018 budget is about 8 percent lower than that for 2017 (excluding development partners' grants), mainly due to a lower allocation for public transfers. Public transfers comprise both personal benefit transfer (e.g. pensions) and public grants (e.g. to other public entities).

[20] State obligations that were not able to be fulfilled by the duodecimo regime.

to be promulgated by both Australia and Timor-Leste's parliaments – the Greater Sunrise development is unlikely to be fully operational in the next decade. The government recently signed a deal to purchase ConocoPhillips' 30 percent stake in the Greater Sunrise Joint Venture for $350 million, which underscores its commitment to the ambitious Tasi Mane project in the South Coast. Meanwhile, systematic excess withdrawals are depleting the Petroleum Fund, which will gradually contribute to lower investment returns. Since its inception, nearly $10 billion have been transferred from the Petroleum Fund to the state budget. Limiting withdrawals of the Petroleum Fund and improving domestic resource mobilisation (by enhancing tax compliance and collection, as well as raising tax rates) would simultaneously support fiscal sustainability, spending efficiency and accountability. Public-private partnerships (PPPs) for large infrastructure projects could also improve project appraisal, quality and timeliness, cost-efficiency and risk management. Rationalising and prioritising capital spending, while moderating recurrent expenditures that are not pro-poor, would constitute better value-for-money and ensure that future generations can also benefit from the Petroleum Fund.[21]

Economic growth and diversification are key priorities. The government program for 2018-2023 targets a real GDP growth rate of 7 percent per year. Only a vibrant, competitive and entrepreneurial private sector will be able to deliver sustained economic growth and generate sufficient decent employment opportunities. The government aims to increase private sector investment by at least 10 percent per year, which will require strong concerted efforts to enhance the business environment – including improved infrastructure (e.g. Dili international airport and ICT), secure land property rights, contract enforcement, competitive public procurement, and modern payment systems.[22] The 2018 Doing Business survey highlighted major weaknesses pertaining to enforcing contracts, registering property, and resolving insolvency – in all of which Timor-Leste ranked at the bottom. Greater economic diversification and value-addition entail the development of strategic productive sectors, such as commercial agriculture, labour-intensive manufacturing, and tourism. These sectors not only have the potential to create a substantial number of jobs and improve domestic linkages, they can also reduce import dependency and enhance export performance – thus helping tackle the currently large trade imbalances.

The domestic political situation may pose the greatest risk to the economy. The new majority government is a coalition composed of three parties – CNRT, PLP, and KHUNTO. A stable coalition is a prerequisite for a smooth and effectual implementation of the government program, while potential frictions could lead to further political instability.[23] A constructive relationship between the President, the national parliament and the government is also of vital importance. If the 2019 budget is not approved and promulgated by the end of the year, then political and economic uncertainty may return. The global economic environment may also affect the economic outlook, especially through international commodity prices, foreign demand and US dollar dynamics. For instance, the ongoing trade war between the Unites States and China could create some downside risks to the outlook.

---

[21] Since 2013, domestic revenues plus ESI have not even covered recurrent spending – mainly because of the scaling up of public transfers.

[22] The key challenges within each area are: getting credit (no legal rights and low information sharing), enforcing contracts (time and cost for resolving a commercial dispute), resolving insolvency (no bankruptcy law), registering property (no practice / secure rights), construction permits (e.g. 88 days to obtain building permit), start a business ($5,000 paid-in minimum capital requirement).

[23] In the 2015 Enterprise Survey, 35 percent of firms ranked political instability as the biggest constraint to business. Corruption was the second (21 percent), with over 80 percent of firms requested or expected to give gifts or informal payments for government contracts.

PART 3.
SPECIAL FOCUS

SUSTAINABLE PATTERNS OF STRUCTURAL CHANGE

The development trajectories of East Asian countries demonstrate that sustained economic and social progress requires significant structural change. Structural change is a gradual process whereby the structure of production and employment shifts from low-productivity traditional sectors (such as subsistence agriculture) to higher-productivity sectors (such as manufacturing and modern services). The reallocation of factors of production – labour and capital – across sectors with different productivity levels can induce considerable economic gains. Through its impact on aggregate productivity, structural change plays an instrumental role in sustaining economic growth, generating productive employment, and raising living standards. This has been the experience of many economies in the region that have subsequently reached high-income status – such as Japan, South Korea and Singapore. Middle-income countries like Indonesia, Malaysia and Thailand have also achieved significant levels of structural change in recent decades.

To achieve the government's 7 percent growth target, productivity growth needs to accelerate considerably. The government of Timor-Leste aims to achieve an average GDP growth rate of 7 percent over the period 2018-2023. To achieve this objective, there is a need to diversify the economy and accelerate productivity growth. The latter can be achieved through within-sector improvements – such as enhanced skills, complementary capital, reallocation of inputs, technological upgrading, and better management practices – but these alone may not lead to a more diversified and inclusive growth process. In fact, the type of growth matters for poverty and inequality. In this context, structural change is fundamental to ensure that economic gains are sustained and lead to commensurate social benefits.

Assessing the pace and pattern of structural change provides an important benchmark. This section assesses key trends in economic structure, labour productivity, and demographic change between 2004 and 2015. Gross value added and employment data – from national accounts and the population census, respectively – are aggregated into seven key economic sectors of activity: agriculture, manufacturing, construction, commerce, finance, public services, and other services (Table 1).[24] Insights are then provided into the pace and pattern of structural change in Timor-Leste.

---

[24] This aggregation was mainly determined by data availability and comparability. Mining was excluded from the analysis because it is not possible to identify JPDA workers within the sector. The population census was preferred to the labour force surveys because national accounts data includes own consumption, which the latest ILO definition now excludes.
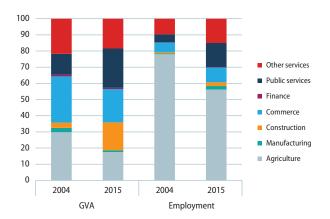
Table 1:   Sectors of economic activity

Sector	Short name	ISIC Rev.4 Section(s)
Agriculture, forestry and fishing	Agriculture	A
Manufacturing; Electricity; Water	Manufacturing	C-E
Construction	Construction	F
Trade; Transportation; Accommodation & food; ICT	Commerce	G-J
Financial and insurance activities	Finance	K
Public administration & defense; Education; Health	Public services	O-Q
Real estate; Professional; Admin; Arts, etc.	Other services	L-N, R-V

Note: Mining and quarrying (section B) was excluded from the analysis.

Construction and public services have grown in importance over the past 10 years. Real gross value added (GVA) nearly doubled between 2004 and 2015 – to over $3 billion. Public services accounted for 24 percent of total output in 2015, while commerce, agriculture, other services, and construction followed closely behind (Figure 17). Construction and public services grew significantly over this period, highlighting the country's efforts to re-build its infrastructure, strengthen public institutions, and enhance service delivery after independence.
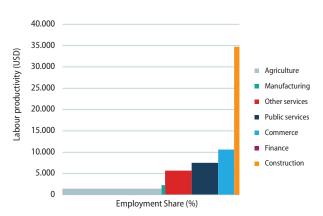
Agriculture remains the main sector of employment, albeit declining. The composition of employment is markedly different from that of production. Most workers continue to rely on subsistence agriculture, even though the sector's share in total employment has declined significantly since 2004. Public services and other services – which includes a range of heterogeneous activities – recorded the largest increases over the same period.[25] The fact that employment structures often lag behind production structures is of great significance, since it has critical implications for the distribution of economic gains. A slow-changing composition of employment is often associated with higher income inequality, as economic gains will accrue to the minority that has access to good jobs. Given average earnings and working conditions, employment reallocations are crucial to engender sustainable and inclusive growth. While these changes have not been slow in Timor-Lester, it is important to create decent (private sector) employment opportunities in key strategic sectors.

Figure 17: Economic structure (%)

Source: MoF-DGE and WB staff calculations

Figure 18: Productivity and labour shares (%)

Source: MoF-DGE and WB staff calculations
Note: Bar area provides information on the share of output. Finance is not visible (0.2 percent of total employment)

---

[25] The increase in other services was mainly driven by activities of households as employers.

There are large disparities in terms of sectoral labour productivity. Aggregate labour productivity grew by nearly 60 percent during the period under analysis – to about $4,500 per worker. However, there are large disparities across sectors (Figure 18). Agriculture has the lowest productivity across all sectors, an observation that is common in most countries in the world. Construction has very high productivity levels (nearly $35,000), although this probably reflects the high capital-intensity of large public infrastructure projects. The existing labour productivity gaps are large – even excluding construction – with productivity levels ranging from about $1,500 in agriculture to $17,500 in finance.

The large productivity gaps observed create an opportunity to boost incomes. By reallocating workers from the lowest to the highest productivity sectors – not literally, but through a gradual process that may take a few generations – sizeable economic gains are generated. However, sectors need to absorb a growing number of workers while sustaining productivity growth. Construction has experienced strong (real) labour productivity growth – as output growth far outpaced job growth – possibly due to the growing capital-intensity of the sector. Agriculture has also recorded productivity increases, with output growing despite reductions in employment levels. However, the remaining sectors have experienced negative productivity growth, as they struggle to absorb new workers. Manufacturing output even declined in real terms between 2004 and 2015. Therefore, there is a need to identify and develop dynamic sectors that can engage new workers without undermining productivity growth.

Wage employment and high skills are predominantly found in public services. Secure and well-paid jobs are usually associated with regular wage and salaried work. Wage employment (14 percent of total employment) is largely circumscribed to public services (Figure 19).[26] Most unpaid workers can be found in agriculture, but also commerce and other services. This is the most vulnerable form of employment, which accounts for 69 percent or total employment. Self-employment (17 percent) is usually a heterogeneous category, since it comprises work with very different average earnings, insecurity levels, and working conditions – ranging from professionals (e.g. consultants, etc.) to street vendors and household workers. In terms of educational attainment, it is also noticeable that most workers with tertiary education (8 percent of total employment) are in public services (Figure 20). Lower levels of education are typically associated with a higher share in agriculture. There are also significant gender differences, with women considerably underrepresented in construction and mining, only reaching parity (or better) in manufacturing and other services – although the latter mainly corresponds to personal household services.

Figure 19: Type of employment (%)

Source: MoF-DGE
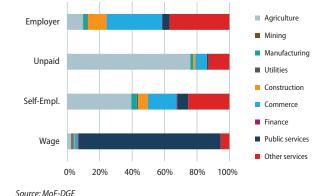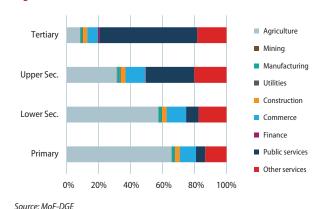
Figure 20: Educational attainment (%)

Source: MoF-DGE

Demographic change is taking place, but a dividend requires the fulfilment of certain preconditions. The share of the working-age population in total population has marginally increased to 55 percent in 2015. In terms of demographic dynamics, a turning point was reached in the early 2000s, when the age dependency ratio started to decline.[27] This has the potential to generate a sizeable demographic dividend, if young workers have adequate skills

---
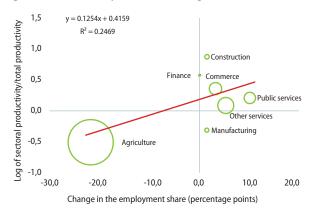
[26] Most of these are in the public sector.

[27] The age dependency ratio is a measure of the economic burden that dependents (children and elderly) place on the working-age population – which usually comprise ages 15-64.

and can access productive employment opportunities. Nonetheless, the employment rate has declined during the period under analysis, which probably arises from young people (15-24 years old) delaying their entry in the labour market by pursuing further education. A youth bulge places strong pressures on the education system (potentially affecting both attendance levels and quality) and on the job market (leading to either unemployment or poor working conditions). It is therefore critical to generate decent employment opportunities for new entrants in the labour market – estimated at 9,000 per year – and invest in education and skills.[28] Otherwise, disaffected youth may become a source of social instability.
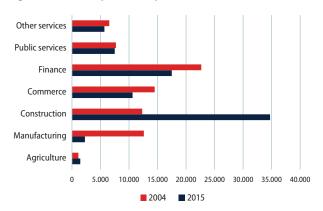
Timor-Leste has followed a classic pattern of structural change. The sector with the lowest productivity (i.e. agriculture) experienced a decline in its labour share – bottom-left quadrant – while sectors with above-average productivity levels have seen their shares in total employment rise – top-right quadrant (Figure 21).[29] The notable exception is manufacturing. The sector recorded a large increase in workers between 2004 and 2015, but these are likely to be own-account contractors engaged in informal low-productivity activities – such as small-scale traditional weaving and other piecemeal manufacturing – rather than modern high-productivity manufacturing production processes.

Figure 21: Productivity and labour changes (%)

$y = 0.1254x + 0.4159$
$R^2 = 0.2469$

Source: MoF-DGE and WB staff calculations
Note: Circle sizes represent the labour shares in 2004.

Figure 22: Sectoral productivity (USD)

Source: MoF-DGE and WB staff calculations

Structural change was the key driver of economic performance – through public services and construction, as well as commerce. To better understand the drivers of economic growth, we decompose output per capita growth into three components: labour productivity growth, changes in employment rates, and changes in the share of the working-age population (i.e. demographic change). Labour productivity can then be further disaggregated into within and between-effects (i.e. structural change).[30] The results suggest that only construction and agriculture had positive (within-sector) productivity growth, while commerce and manufacturing recorded large declines – as employment growth outperformed output growth (Table 2). Declining sectoral productivity is concerning and suggests that these sectors have not been sufficiently dynamic to successfully absorb new workers (Figure 22). Overall, this component did not have a strong (net) effect on output per capita growth. In terms of between-sector effects (structural change), agriculture was the key contributor, but mainly because it shed workers – in both relative and absolute terms.[31] Public services, construction and commerce provided strong positive contributions. The changes in employment (rates) confirm the shift from agriculture towards public services and other services (to a smaller extent). Overall, public services and construction were the key drivers of output per capita growth during the 2004-2015 period. Demographic change also provided a sizable contribution (10 percent).

---

[28] Enterprise Skill Survey 2017, SEJT. UNDP's National Human Development Report places the number even higher at 30,000.

[29] Relative productivity is measured by the logarithm of the ratio between sectoral and total productivity in 2015.

[30] This decomposition used the World Bank's Job Generation and Growth Decomposition tool.

[31] A sector will have a positive between-sector effect if either it has above-average labour productivity and its employment share increases, or it has below-average labour productivity and its employment share declines.

Table 2: Decomposition of output per capita growth

Sector	Share of contribution from (%):			Total contribution (%)
	Within-sector productivity	Between-sector productivity	Changes in employment	
Agriculture	17.1	42.9	-94.6	-34.6
Manufacturing	-11.2	4.3	3.9	-3.0
Construction	27.3	23.9	3.9	55.0
Commerce	-22.7	22.4	6.4	6.2
Finance	-0.7	0.8	0.1	0.2
Public services	-1.5	30.4	25.8	54.7
Other services	-8.4	9.7	10.4	11.6
Sub-totals	-0.1	134.4	-44.1	90.2

Source: MoF-DGE and WB staff calculations.
Note: The total does not add up to 100 because the demographic component (9.8 percent) cannot be disaggregated by sector. Gross value added per capita increased by 41 percent over 2004-2015.

While the evidence is encouraging, there is a need to improve sectoral productivity and generate decent private sector jobs. Changes in economic structure have been broadly positive – delivering higher per capita incomes – but a deeper assessment of sectoral dynamics suggests that greater efforts to accelerate within-sector productivity are required. This may require in-job training and organisational improvements in the short term, but also improved health, nutrition and educational outcomes in the medium term. Stagnant within-sector productivity levels undermine overall economic performance and weaken the impact of labour reallocations. Countries that have been able to achieve significant structural change have done so in a context of strong within-sector productivity growth. Moreover, seizing a demographic dividend requires a strong and dynamic private sector that can create a sufficient number of decent employment opportunities for new entrants in the labour market. Further analysis would be required to shed more light on sectoral trends, especially by disaggregating commerce and other services – which currently is not possible. The services sectors are notoriously heterogenous, often comprising modern activities (such as scientific research) and traditional activities (e.g. employment in households).
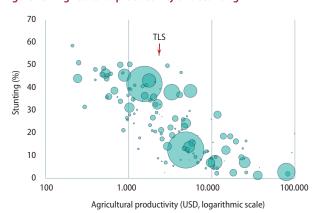
The key policy implication is that there is a need to shift the pattern of structural change to a more sustainable path. The current path of structural change relies on public services and construction, which is unlikely to be sustained in the medium-term. These sectors are mainly driven by strong public spending, which in turn is intrinsically dependent on petroleum revenues. Even commerce – mostly wholesale & retail trade – relies on linking foreign producers to domestic consumers, emphasising import dependence and lack of manufacturing. Unlike many developing countries, Timor-Leste has abundant financial resources to investment in increasing the productive capabilities of (dynamic) sectors that can simultaneously generate productivity gains and provide sufficient decent employment opportunities to a growing workforce. For instance, natural resource revenues have supported manufacturing growth in Chile, Indonesia and Malaysia. Shifting the initial drivers of economic growth from construction and public services to more sustainable sectors is of vital importance. To achieve this, especial attention ought to be given to strategic economic sectors – such as commercial agriculture, labour-intensive manufacturing, and tourism.[32] However, targeted support to specific sectors needs to be based on rigorous cost-benefit analysis and ensure that adequate incentive structures are in place. This should include an assessment of Timor-Leste's comparative advantages to gauge the potential role that foreign demand can play in their development.

---

[32] Mining is unlikely to provide such outlet, due to its capital-intensive nature. Employment in the sector increased from 251 to 436 workers between 2004 to 2015. In fact, research suggests that abundance of mineral resources often acts as a deterrent to structural change.

Agriculture is a crucial sector due to its potential to reduce poverty, enhance food security, and provide reliable supplies for agro-industry. Agriculture – including fisheries and forestry – remains a critical sector for the economy. Since poverty is largely concentrated in rural areas, raising farmers' incomes can considerably improve living standards and reduce spatial inequalities. Moreover, food insecurity is one of the key contributors to malnutrition. About 46 percent of children under the age of 5 are stunted – one of the highest values in the world (Figure 23) – which is estimated to induce economic losses equivalent to 2 percent of GDP per year.[33] Encouraging the adoption of modern inputs – such as improved seeds, fertilisers and irrigation – supporting extension services and improving market access (through rural infrastructure) could help raise productivity levels and facilitate the emergence of commercially-oriented production units. In addition to further developing the coffee sector, other sectors may also hold significant potential such as fisheries and aquaculture, horticulture, livestock and agro-forestry. Nonetheless, the sector will continue to shed workers that will move to urban areas looking for better jobs. This will intensify pressures in the labour market, unless the private sector is able to create decent employment opportunities – secure and well-paid jobs – for a growing young population with higher expectations.
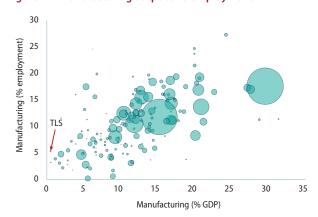
Figure 23: **Agricultural productivity and stunting**

Source: World Development Indicators.
Note: Circle sizes indicate population size. Agricultural productivity relied on data from labour force surveys.

Figure 24: **Manufacturing output and employment**

Source: World Development Indicators and ILOSTAT.
Note: Circle sizes indicate population size. Employment in manufacturing relies on data from labour force surveys.

Manufacturing has traditionally been a key sector in engendering structural change. Much of East Asia's success in raising living standards over the past 50 years has been underpinned by a strong manufacturing sector. The sector usually benefits from increasing returns to scale, high tradability, and strong backward/forward linkages to agriculture and services. In Timor-Leste, the sector mainly comprises informal low-technology production units. Low productivity levels are due to the lack of physical and human capital, market size, geography, and firm characteristics. At less than 1 percent, Timor-Leste probably has the lowest share of manufacturing in GDP in the world (Figure 24). However, labour-intensive manufacturing processes have low skill requirements and can lead to significant job creation, promote greater value addition (e.g. of agricultural products), and ease the country's heavy dependence on manufactured imports. Since manufacturing predominantly employs women, its development would also support gender equality. In the context of a focused industrial policy, greater emphasis on demand-driven technical and vocational education and training (TVET), business incubators and industrial parks – offering necessary infrastructure and services such as electricity, water, telecommunications and waste disposal to prospective firms – could facilitate economic diversification.[34] These could potentially serve several industries, such as food processing, construction materials, wood products, fisheries, livestock, and apparel.

---

[33] Stunting affects cognitive abilities and motor development in children, which later hinder productivity. Malnutrition costs the economy $41 million per year in lost economic activity.

[34] TVET programmes based on regular dialogue with the private sector could help address existing and emerging skill gaps. The Enterprise Survey 2015 suggests that only 2 percent of firms offer formal training, compared to an average of 57 percent in the East Asia & Pacific region. A costing of the SDP – especially for education and health – would be vital.

Tourism and other (modern) tradable services could also deliver significant employment and productivity growth. Tourism has the potential to generate substantial direct and indirect employment opportunities – in accommodation, commerce, recreational activities, and transport services. Unspoilt natural resources, a rich history, and a unique cultural heritage could make Timor-Leste a very attractive tourism destination – including for business meetings and conferences. However, many service activities require relatively high education and skills levels, as well as complementary infrastructure. Service sectors would therefore benefit from stronger investments in basic education and TVET, improved infrastructure (e.g. airports and accommodation), a more conducive business environment, and tourism promotion activities (to improve the country's image abroad).

IMPROVING EDUCATIONAL OUTCOMES

Education plays a key role in enabling structural change, enhancing productivity and accelerating economic growth. Education and knowledge are critical to accelerate structural change and raise labour productivity. This is because improved skills enable workers to move to more productive jobs. There is also considerable empirical evidence on the positive relationship between human capital levels and long-term economic growth. Educational attainment and learning outcomes – two of the main components of human capital – are low in Timor-Leste, which limits economic prospects.

Educational attainment is low, but has improved considerably in recent years. The educational attainment of the adult population has been estimated at 4.5 years of schooling, similar to the levels in Cambodia and Myanmar, but far behind other countries in the region – such as Thailand and Malaysia (Figure 25). This low academic achievement indicates that, on average, the population has not mastered the basic skills related to primary education and that they are not ready to engage effectively in a modern dynamic economy. However, the educational profile of the population is changing at a fast pace, with strong improvements in younger cohorts. In 2014, the average educational attainment of those aged 25-30 was 7.2 years, about ten times the attainment of people aged 60-65 (Figure 26).

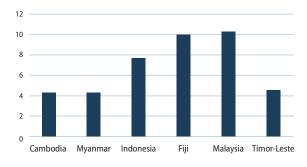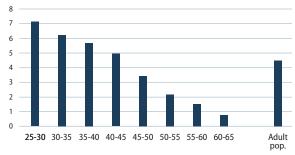**Figure 25: Educational achievement (school years)**

Source: Barro-Lee.

Figure 26: Educational achievement by age (years)
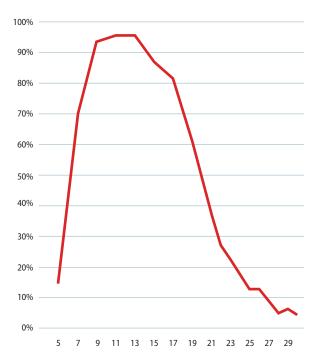
Source: Household survey (2014)

Improvements resulted from higher enrollment rates, but have been limited by low levels of student learning. More than 90 percent of children aged 9-14 is enrolled in the education system (Figure 27). However, the progress has been limited by the low efficiency of the education system. Despite high levels of student enrollment, only 63 percent of students completed primary education by age 15, and only 55 percent of students completed basic education by age 18. This is partly explained by large number of students repeating and dropping out the education system. While Timor-Leste has not participated in major international tests, existing information from Early Grade Reading Assessment (EGRA) test indicates low levels of early reading proficiency by international standards.

Figure 27: Enrolment by age group (%)

Source: Household survey (2014).

Figure 28: Educational achievement of 18-year-olds

	Enrolled	Not Enrolled
No grade	2%	1%
1st grade	1%	0%
2nd grade	1%	0%
3rd grade	1%	2%
4th grade	2%	1%
5th grade	3%	1%
6th grade	3%	3%
7th grade	7%	2%
8th grade	11%	1%
9th grade	8%	3%
10th grade	23%	0%
11th grade	18%	1%
12th grade	1%	6%
Total	**80%**	**20%**

Source: Household survey (2014)

High repetition rates are indicative of low student learning. Repetition rates are high during the first three years of basic education: approximately one-third of the class repeats first grade, and one-fifth repeats second and third grade. High repetition rates in early grades are related to low levels of learning. A comprehensive assessment of student learning on early grades showed that, on average, students read 22 words per minute,[35] while the results of a Curriculum Based Assessment showed low levels of mastery of second grade curriculum, with a score of 40 percent. The results of the assessment also showed that the greatest challenges in student learning are among the non-Tetum speaking students.

School dropout starts at age 14 and accelerates at age 18. The academic achievement of those that drop out of school is very low. Analyzing the education profile at age 18 shows that while most students are still at school, very few students have reached the expected 12 years of education. About 1 percent were enrolled on 12th grade (and 6 percent had achieved the 12th grade), while 38 percent were still attending basic education. International evidence suggests that being overage is one of the main reasons for student dropout.

Despite the progress achieved since independence, key challenges remain. The low performance of the educational system can be partly explained by low pre-school enrolment, poor school infrastructure, lack of qualified teachers, and education governance. To improve educational outcomes, the following measures could be prioritized:

- **Ensuring that students enter first grade ready to learn.** High repetition rates at the first years of schooling signal that students are not reaching the education system ready to start first grade. The net enrollment rate in pre-school education is 20 percent (with the gross enrollment rate at 22 percent), which is low rate by international standards. Therefore, pre-school enrollment needs to be expanded, especially to those coming from disadvantage conditions or whose language is different from the language of instruction in first grade.

---

[35] An Early Grade Reading Assessment (EGRA) was performed in 2017.

Timor-Leste Economic Report | October 2018

- **Evaluating and addressing infrastructure challenges.** There have been improvements in infrastructure, with reductions in the number of students per classroom – from 55 in 2011 to 37 in 2016 – but there are major differences across districts. In Dili, data shows that there are 80 students per classroom, while in Manufahi there are 20 students per classroom. In many cases, low ratios have been achieved by double or triple shifts in schools. Additionally, the lack of infrastructure is reflected by the fact that approximately 40 percent of students start primary education in schools that do not have classrooms for all grades. Existing information also indicates poor quality (and maintenance) of the existing infrastructure. Efforts to build and rehabilitate schools need to be backed by an adequate budget for operation and maintenance. Addressing over-crowding and, more generally, the lack of school facilities in many areas of the country, may contribute to reducing student dropout.

- **Increasing teacher competences, especially in the first grades.** There have been significant improvements in formal teacher qualifications. In 2016, only 10 percent of basic education teachers did not have the required qualification – a Bachalerato degree.[36] However, less than 40 percent of the teachers obtained the degree from a university. Most teachers obtained their qualifications through equivalency programs, suggesting that they had limited pedagogical training. Equivalency programs have been implemented through a collaboration between the Universidade Nacional de Timor-Leste (UNTL) and the Instituto Nacional de Formação de Docentes e Profissionais da Educação (INFORDEPE) to upgrade teacher academic qualification. Looking forward, teacher training programs should be expanded and packaged as an integral part of a professional management system. Teacher competences should be improved, especially for the first grades of primary education.

- **Improving the governance of the education system.** Timely and reliable information is crucial for policy making. While there are information systems on teacher and infrastructure needs, their use for making decisions has been limited. Moreover, the root causes of school dropout and repetition should be analyzed comprehensively to inform mitigation policies. Improved school monitoring could help ensure that resources (e.g. teaching materials) are available and distributed to schools where they are most needed. Finally, innovative methods could be tested and used – especially those that have been adopted in similar contexts – to promote reading proficiency, which is a foundation for learning.

---

[36] The Bachalerato certificate is a certification program that includes three years of study upon completion of senior secondary school.

ECONOMIC INDICATORS

	2013	2014	2015	2016	2017
Real sector (annual percentage change)					
GDP growth	2.5	4.1	4.0	5.2	-4.7
Final consumption expenditure	-5.9	8.5	1.6	2.9	0.7
Gross fixed capital formation	-21.5	6.0	-3.6	16.0	-23.8
CPI inflation	11.1	0.7	0.6	-1.3	0.6
Fiscal sector (percent of GDP)					
Total revenue	85	74	60	56	51
Domestic revenue	11	12	11	12	12
Grants	18	19	10	12	10
Estimated Sustainable Income (ESI)	56	43	40	32	30
Total expenditure	95	111	93	108	83
Recurrent expenditure	52	63	64	60	58
Goods and services	28	32	26	22	20
Wages	10	11	11	10	12
Transfers	14	20	27	28	25
Capital expenditure (including loans)	43	48	29	47	26
Financing	10	37	33	52	32
Excess withdrawals from Petroleum Fund	-4	7	40	41	37
Loans	0	1	2	2	2
Cash balances (use of)	14	29	-8	9	-7
Monetary and financial sector					
Credit to the private sector (% GDP)	12.5	12.1	12.0	10.7	14.0
Lending interest rate (%)	12.5	13.1	13.9	14.5	12.5
Nominal effective exchange rate (index)	105	112	125	126	126
Real effective exchange rate (index)	125	129	141	137	135
External sector (percent of GDP)					
Current account	169	75	13	-32	-18
Goods and services	-74	-82	-76	-66	-59
Primary income	235	147	81	32	45
Secondary income	8	11	8	2	-4
Capital account	1	1	2	3	2
Financial account	-181	-95	2	29	31
Direct investment	3	3	2	0	0
Portfolio investment	-180	-95	9	41	21
Other investment	-3	-2	-9	-12	9
Memorandum items (USD million)					
GDP (constant 2015 prices)	1,486	1,548	1,609	1,694	1,615
Petroleum Fund (closing balance)	14,952	16,539	16,218	15,844	16,799