Timor-Leste Constraints Analysis Summary

Executive Summary

When Timor-Leste gained independence from Indonesia in 2002, the country faced high rates of poverty and extremely low levels of human development. Since independence, the country's economic development has been shaped by the discovery of oil. Spurred by government spending, real per capita income grew by a rapid 6% per year between 2007 and 2015, poverty rates declined from roughly 47% in 2007 to 30% in 2014[1], and health indicators improved significantly. While Timor-Leste has made important strides in human development, private investment has remained flat and growth of the non-oil sector has been stagnant since 2011. Going forward, private sector-led growth that is enabled, but not driven, by government will be critical for sustaining Timor-Leste's social and economic progress.

The MCC constraints analysis identified the following binding constraints that limit private sector-led growth in Timor-Leste:[2]

- **Public Financial Management: Low sustainability and effectiveness of fiscal expenditures** – Government expenditures are on an unsustainable path that could lead to the drawdown of resources in the Petroleum Fund and resulting fiscal difficulties. The efficiency and targeting of Government expenditures could also be improved to better promote private investment and economic growth.
- **Dutch Disease: An uncompetitive real exchange rate** – The rapid inflow of resources enabled by oil has led to inflation of prices of local inputs. As a result, it is difficult for tradeable sectors such as manufacturing and tourism to compete against lower cost international producers.
- **Business Enabling Environment: Weak policies and institutions to enable market transactions --** Timor-Leste has not yet fully put into place the policies and institutions needed to support a market economy. Specifically, the country lacks a legal framework and judicial institutions to support contracts and their enforcement. Access to land and the absence of secure land titles are also problems. These leads to inefficiencies and limit the number of business transactions that can occur, especially within financial and land markets.
- **Human Capital: Poor nutritional outcomes and lack of high skilled workers –** While Timor-Leste has made progress developing its human capital from a very low base, more gains are needed. Early childhood health and nutrition are poor, and a relatively high percentage of children under the age of five are stunted. In the workforce, the lack of tertiary education is costly to firms and has resulted in 30-40% of professional jobs being filled by foreign nationals.

[1] Using the international poverty line of US$1.90 per day at 2011 purchasing power parity prices.
[2] Moving forward, MCC will work with the Government of Timor Leste to develop a compact program that addresses one or more of the binding constraints relating to public financial management, the business enabling environment, and human capital.

Process and Country Engagement

As the first step in the development of a Threshold Program[3], MCC undertook an integrated Constraints Analysis (CA) in collaboration with the Government of Timor-Leste. The Government of Timor-Leste's (GoTL) engagement with MCC has been led by the Office of the Prime Minister, led by Mr. Alex Tilman, Public Policy Officer, in collaboration with the Ministry of Finance, led by Mr. Azevedo Marçal, Economic Policy Advisor. A team[4] from the Ministry of State, Coordinator of Economic Affairs (MECAE) led GoTL's technical level input to the analysis. MECAE also facilitated coordination among donors, which was particularly valuable in the case of Timor-Leste as both the World Bank and the Asian Development Bank were undertaking similar studies coinciding with MCC's constraints analysis. The ADB and World Bank's collaboration in the analysis contributed significantly to the findings. While this summary memo does not necessarily represent the views of other donors, there is broad agreement across the collaborators on the constraints. Additionally, valuable input was provided by other stakeholders, including USAID, other donors, NGOs, civil society, and the private sector in Timor-Leste.

The MCC team[5], with participation by USAID, traveled to Timor-Leste in May 2017 to introduce the CA process, conduct workshops on the methodology, and consult stakeholders.[6] Subsequently, the team engaged a consultant to develop a detailed assessment of the country's financial sector. A follow-on mission was also undertaken to examine gender and social dynamics. As Timor-Leste's parliamentary elections took place on July 22, 2017, MCC's mission to validate the CA results was deferred until September 2017. During that mission, the technical working team, as well as donor partners, expressed agreement on the results of the constraints analysis. A letter from Prime Minister Alkatiri dated November 10, 2017 affirmed the GoTL's agreement with the identified binding constraints.

Timor-Leste's Context and Economic History

Timor-Leste is a mountainous, island nation of 1.3 million people. It is located in the Timor Sea just north of Australia and shares a border with Indonesia to the west. Portuguese and Tetum are official languages, although thirty-two indigenous languages are spoken in addition to Indonesian and English. About two-thirds of the population are rural, subsistence farmers. The capital city is Dili with 230,000 inhabitants. The climate is tropical with a distinct rainy season from December through April.

Portugal declared the territory a Portuguese colony in the 18th century and established the capital city of Dili. Timor-Leste declared independence from Portugal in 1975, but was immediately invaded and occupied by Indonesian forces.. It was incorporated into Indonesia in July 1976 as the province of Timor Timur (East Timor). An unsuccessful campaign of "pacification" followed over the next two decades during which up

[3] Timor Leste was initially selected for a Threshold Program in December 2016, and subsequently for a Compact Program in December 2017.

[4] Led by Sam Porter (Economic Adviser); with Leonito Soares de Jesus (Junior Professional Economist); Dayna Connolly (ODA Economist, Ministry of Finance); and Cecilia Requena (Economic Adviser)

[5] MCC team: Malik Chaka (THP), Siobhan Pangerl (THP), Brad Cunningham (EA), Mark Gellerson (EA), Bersabeh Beyene (GSI), Luisa Escobar (GSI), Courtenay Engelke (FIT), and in collaboration with Joshua Templeton (Economist, USAID).

[6] Many GoTL personnel were familiar with MCC as this was not MCC's first engagement with Timor-Leste. In 2005 the country was initially selected to develop a compact program. As a result of civil unrest in the country in 2006 and other factors, MCC transferred Timor-Leste to the Threshold Program. The first Timor-Leste Threshold Program was successfully implemented in collaboration with USAID from 2010 to 2014 and supported establishment of the Anti-Corruption Commission and improved access to immunization services.

to a third of the East Timorese population perished due to violence, hunger, and disease In 1999, Suharto's regime in Indonesia came to an end and Timor-Leste undertook a referendum vote in support of independence. The independence movement led to renewed violence from anti-independence factions, during which time much of the country's infrastructure was destroyed. The United Nations took over administration of the country to support its transition to independence. Finally gaining full independence on May 20, 2002, Timor-Leste is now the world's second youngest country.

While independence brought much to celebrate, the nation was born facing incredible development challenges. In 2002, 73% of the population was poor (below USD $3.10 per day, 2011 PPP) and 44% were in extreme poverty (below USD $1.90 per day, 2011 PPP). Only 38% of the population was literate, life expectancy was 60.3 years, maternal mortality was 646 women per 100,000 live births, and just over a third of the population had access to electricity.[7] The challenges of consolidating a new country led to factional violence erupting again in 2006, and a return of UN peacekeeping forces.

Since 2006, Timor-Leste has seen significant progress. The country has successfully conducted three parliamentary elections and achieved a reasonable degree of political and economic stability, improving from the 14th to the 43rd percentile among all countries in the Worldwide Governance Indicator of political stability. Yet conflict remains a risk not just for national stakeholders and citizens, but also for the almost half of women and girls who continue to experience sexual and gender-based violence within the home.

Timor-Leste's economic growth since independence has been shaped by the discovery of significant offshore petroleum resources and the establishment in 2005 of the Petroleum Fund (PF). Rapid increases in government investment and expenditures financed through the PF led to high economic rates of growth at near 10% from 2007 through 2010. Since then, growth has slowed to around 5%, and today non-oil GDP per capita is near $1,500. Government expenditure has led to significant improvements in some infrastructure, and driven growth in the economy, which has contributed to a decline in poverty from 47% in 2007 to 30% in 2014. Health outcomes have also improved, including infant mortality and life expectancy.

To date, aggregate growth, as well the welfare gains described above have been heavily dependent on public spending that relies on revenue from the PF, but which has not stimulated significant new private sector activity. Going forward, private sector-led growth, enabled, but not driven by government, is critical for the sustainability of Timor-Leste's economy. Unemployment is a significant challenge, especially as a youth bulge will begin entering the labor market over the next decade; over half of Timor-Leste's population is under 19 years old and at least 20% of youth are unemployed.[8] Women also have a low rate of labor force participation, which was 30 percent compared to 52 percent for men in 2017[9]. The portion of Timor-Leste's private sector that does not depend directly on government expenditures is primarily engaged in agriculture (particularly coffee, cultivated by small holder farmers), services, and tourism. While coffee yields have been falling over time (currently at one half to a third of their peak in the 1970s), coffee still constitutes the majority of the country's non-oil exports with a modest value of $10-15 million annually. [10] In recent years tourism has generated a similar level of foreign exchange as coffee, and provides employment for around

[7] World Bank, World Development Indicators
[8] 2013 Labor Force Survey
[9] World Bank, World Development Indicators
[10] UNCTAD

5,000 workers.[11] While both agriculture and tourism face sector specific challenges and coordination problems, both sectors are also affected by the economy-wide binding constraints discussed below.[12]

Timor-Leste's Binding Constraints to Growth

I – Public Financial Management: Low Sustainability and Effectiveness of Fiscal Expenditures

The establishment of the Petroleum Fund (PF) in 2005, into which all revenues from petroleum are deposited, allows the country to convert its natural resource into a financial resource. The PF both provides a return on the principal balance (averaging about 4% per annum) as well as insulates the economy from shocks in the oil market. Withdrawals from the PF account for 90% of the GoTL's revenue, with the remaining 10% coming from domestic taxes and import duties (and nearly negligible borrowing). While withdrawals are sustainable at a rate of 3% of the principal balance, excess withdrawals may be (and frequently are) approved by Parliament.

With a current balance of roughly $15.8 billion, the PF is healthy in the near term. But if withdrawals continue to exceed sustainable levels, as is suggested by planned expenditures and IMF projections, the PF will eventually be exhausted.[13] The potential for exhaustion of the PF puts the country's economic and social achievements at risk, as government expenditure depends on the PF, and the economy depends on government expenditures. Additional resources from the petroleum sector, unlocked by the recent agreement with Australia over the Greater Sunrise field, may come online in time to significantly extend the life of the fund. However, this outcome faces uncertainty and does not change the ultimate necessity of developing an economy that is driven by the private sector rather than by government expenditure.[14]

To achieve a sustainable fiscal trajectory, the GoTL must address challenges in both revenues and expenditures. The GoTL has considered the adoption of a value added tax (VAT) as a first step towards generating domestic revenue that could eventually complement withdrawals from the PF. Yet the ability to raise domestic tax revenue depends not just on strengthening Timor-Leste's tax policy and administration, but also on developing a domestic economy that can provide a tax base.

To expand the domestic economy, capital expenditures by the GoTL must become more effective at targeting the right investments to crowd-in private investment and promote growth. As prime examples, the GoTL has recently spent hundreds of millions of dollars in Tasi Mane[15] and Oecusse[16] without clearly establishing that these projects will leverage corresponding private investment and growth. As a result, despite the highest level of public sector capital expenditure in the world from 2009-2014 (as a percentage of GDP), private investment has shown little to no growth. Gross fixed capital formation by the private

[11] 2014 Survey of Travelers to Timor-Leste, Asia Foundation

[12] In addition, there are prospects for additional growth in the oil and gas sector, including planned processing infrastructure along the south coast, but the sector is not projected to be a large employer.

[13] 2016 IMF Article IV

[14] Agreement on the maritime boundary between Australia and Timor Leste was reached in March 2017, potentially clearing the way for the development of the Greater Sunrise field. However, the commercial prospects for this field remain uncertain given the vagaries of international oil and gas markets. Under best case conditions, Timor Leste may benefit from new and significant inflows of petroleum revenues starting in roughly 10 years.

[15] A region on the south coast of Timor-Leste where the GoTL hopes to develop a petroleum refining facilities.

[16] An enclave located in the Indonesian part of the Timor island and a designated special economic zone.

sector, a measure of private sector investment, has ranged from 6.5% to 9.0% of GDP since 2010 – one of the lowest rates of private investment in the region.

The efficiency of public expenditures also appears low. For example, unit costs for public works like road construction are high compared to similar activities in other countries.[17] The power grid also exhibits substantial overcapacity due to suboptimal planning of public investments. As infrastructure has grown rapidly, the maintenance requirement of these assets throughout their lifetime will place a significant burden on the GoTL's institutional capability and fiscal resources, creating risks to the longevity of the assets.

Public spending on social protection has also grown significantly, but most of these transfers do not benefit the very poor. Established in 2008, veteran benefits have been billed as an essential pillar of nation building and a strategy for promoting stability. These resources represent between 6-9% of the national budget, and around three-quarters of national welfare expenditure totals.[18] Payments are so high that, in total, they tend to exceed government budgets for essential public services, including health and education. Only a relatively small fraction of the population receives these benefits, and therefore such spending is unlikely to have widespread, national effect on poverty.[19] Women are disadvantaged, and represent only 26-38% of beneficiaries. In contrast, *Bolsa da Mãe*, or "Mother's Purse," targets the poor. However, eligibility is limited, and payments represent less than 3% of the household budget of recipients (World Bank 2013 and ADB 2014).

II – Dutch Disease: An Uncompetitive Real Exchange Rate

The rapid increase of government expenditures beginning in 2008 generated significant excess demand and thus inflation within the economy. Even though the country has adopted the U.S. dollar as its currency, inflation rates exceeded 10% from 2011 to 2013, the highest rate among dollarized countries over this time period.

Growing government spending increased the demand for a wide range of goods and services. The demand growth that was for tradeable goods that could be supplied through increasing imports. However, some goods and services such as construction are non-tradeable, and cannot be imported. Because local suppliers of non-tradeables were not able to increase production as rapidly as demand was growing, prices in these sectors went up relative to prices of tradeable goods. This resulted in so-called Dutch disease effects as the *real exchange rate (RER)* – the ratio of prices for non-tradeable goods relative to tradeable goods – appreciated. More recently, strengthening of the U.S. dollar further appreciated Timor-Leste's RER. While the RER has come down a bit since its peak in 2015, it is still estimated to be 40% higher than in 2010.[20]

Dutch disease can be observed in the high cost of labor (a non-tradeable input) relative to Timor-Leste's level of economic development. Median and mean monthly wages ($272 and $531 respectively)[21] are significantly higher than in regional neighbors such as Indonesia and the Philippines.[22] Similarly, the Asian

[17] Timor-Leste Public Expenditure Review: Infrastructure, MoF and World Bank, March 2015
[18] Judicial System Monitoring Program, 2015
[19] Dale, P., Lepuschuetz, L. and Umapathi, N. (2014), Peace, Prosperity and Safety Nets in Timor-Leste: Competing Priorities or Complementary Investments? Asia and the Pacific Policy Studies, 1: 287–296. doi:10.1002/app5.25
[20] World Bank estimates
[21] 2013 Timor-Leste Labor Force Survey
[22] World Bank Infrastructure Expenditure Review (2014)

Development Bank benchmarked the cost of a Burger King Whopper Value Meal[23] across nine Southeast Asian countries and the United States[24]. Timor-Leste had the second most expensive meal out of all the countries sampled, ahead of Singapore and the U.S., reflecting the high cost of non-tradeable inputs.

The high cost of operating in Timor-Leste has made it difficult for tradable sectors, such as manufacturing or tourism, to be price competitive in the region. Currently, manufacturing's contribution to GDP is just 1%, one of the lowest levels in the world. This has impacts on the poor as a sector like manufacturing might otherwise employ greater numbers of low skilled workers, especially women whose employment tends to concentrate in light manufacturing.

Furthermore, because most poor households are not in wage employment and depend on income from tradeable commodities like coffee, their incomes do not rise with inflation, while their expenditures on non-traded goods (such as housing and transport) do.

At present, policy options to manage the real exchange rate in Timor Leste are limited. This is partly due to dollarization of the economy, which has provided useful stability, but at the cost of preventing independent monetary policy. Never the less, fiscal policy can play some role in managing the RER. Avoiding further rapid increases in expenditures will help the real exchange rate to continue on its moderating path. Relaxing other constraints will also be important. Addressing human capital and business environment constraints can help firms overcome the high costs of local inputs.

III – Business Enabling Environment: Weak Policies and Institutions to Enable Market Transactions

While market based economies offer the best prospects for growth and poverty reduction, they require an adequate framework of laws, regulations, and institutions (part of the "business enabling environment") to facilitate economic transactions. As Timor-Leste is a young, post-conflict country its supporting framework for market transactions is underdeveloped. The lack of a commercial legal framework and related judicial institutions to support contracts and their enforcement underlies problems across a variety of markets and sectors.

These issues are reflected in Timor-Leste's poor performance on the World Bank's *Doing Business* report, ranking 175th out of 190 economies in 2017. The most problematic rankings relate to the enforceability of contractual rights. Timor-Leste has the highest cost of enforcing a contract in the world, at 163% of the claim value, far above the second highest cost of 119% in Mozambique.[25] Out of 190 countries, Timor-Leste ranks last in "enforcing contracts", 187th on "registering property", 169th on "resolving insolvency", and 167th on "getting credit". [26]

The weak framework for contracts and their enforcement has impacts across the economy, but financial and land transactions are particularly affected.[27] Potential borrowers are unable to provide effective guarantees for a loan because there is no legal framework through which lenders can encumber, register,

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[23] ADB Pacific Economic Monitor, July 2017

[24] Excluding Australia, where the Whopper is significantly different than in other countries.

[25] World Bank Doing Business Indicators.

[26] While the Doing Business Indicators are indicative of the problem, they do not necessarily represent a road map for reform. For example, the DBI highlights the need for an insolvency law, but according to the Legislative and Judicial Reform Committee of Timor-Leste, the country first needs an improved commercial contracts law.

[27] Labor market transactions also appear hindered by an inability to use labor contracts, although the evidence is sparser. Instead of a contractual relationship with labor, firms appear to rely on informal and or customary institutions to structure employment relationships.

seize, or enforce collateral. Furthermore, even if a policy and legal framework were in place, the court system lacks bandwidth and expertise to hear commercial cases. One bank official's experience with attempting to resolve non-performing loans through the court system is exemplary of the situation, stating:

> *"Out of 100 cases that we filed at the court, only 7 made it through to court hearings. Out of these, we won all, but there has been no enforcement of the order."*

These high risks translate into high costs of accessing finance. Real interest rates as high as 14% on loans are common. In response to this, many firms look outside the traditional banking system and use supplier relationships to access finance more often than firms in comparator countries.[28] As a result, the amount of lending to the private sector by financial institutions is quite low at that less than 20% of GDP.

The lack of rules and institutions to support the market for land transactions makes land unsuitable for collateral. While the recently promulgated land law provides a solid basic for strengthening Timor Leste's land transactions in the future, important subsidiary legislation remains to be drafted and approved, and thus meaningful implementation of the new law has not yet begun. The provision of land rights, including clear title to landholders, faces significant challenges in a country with competing claims stemming from the legacy of three distinct tenure systems: Portuguese, Indonesian, and customary. The tourism sector is especially constrained by a lack of clear land rights. One of the largest planned investments in the country is a resort project that has been on hold for years due to a variety of land-related issues. Until policies and institutions to support land transactions are improved, transactions will remain difficult, especially for small to medium sized enterprises, and the potential for land as collateral will remain untapped.

The new land law presents additional challenges. First, it will displace customary mechanisms for land dispute resolution that communities rely upon. If access to courts or formal dispute resolution mechanisms are not made available, land disputes could become a source of conflict. The complicated nature of the current cadastral system, and the manner in which it has reportedly fostered distrust and fear in ownership rights is particularly concerning. Many small firms also do not hold title to their land and face uncertainty with the implementation of the new law.

Women have particular difficulty in securing rights to land. According to one stakeholder, during the Portuguese colonial period, women were signatory to about 80% of household documentation. Currently, women are less likely to claim rights to household property or household economic production, and are more likely to have rights subsidiary to that of male family members. While the legal system supports the right of women to own land, during the past two cadastral processes, women have not enjoyed equal access to titling.

In conclusion, having only been independent for 15 years, Timor-Leste has not yet put in place the policies and institutions necessary for an effective business enabling environment. The inadequacy of laws, regulations, and institutions to support business transactions and contracts is a binding constraint to economic activity, especially in financial and land markets.[29]

IV –Human Capital: Poor Nutritional Outcomes and Lack of High Skilled Workers

[28] World Bank Enterprise Surveys 2015

[29] Smaller firms also often face additional challenges relating to licensing, financial literacy, and business management. While serious for some small firms, they are not judged to constitute a binding constraint for the overall economy.

Human capital in Timor-Leste has seen significant improvement since independence. In education, the literacy rate has gone up by 25 percentage points to 58% among adults and youth literacy has reached 82%. In health, the overall disease burden[30] has decreased significantly, while life expectancy has reached 68 years, a level higher than most other countries at Timor-Leste's level of income. However, these improvements have occurred from an especially low base and the legacy of conflict and low investments in health and education remains.

A. Impaired Child Growth and Development

Timor-Leste suffers from one of the highest rates of stunting in the world.[31] Among children 0-59 months of age, roughly 50% were stunted as of 2013[32]. Stunting undermines children's cognitive development and ability to succeed at school. However, stunting is not a condition caused solely by food and nutrition insecurity or a lack of dietary diversity. Factors such as the quality of health care provided at the household and/or health service center, exposure to pathogens (generally due to poor water, sanitation and hygiene conditions, other environmental pollutants, and unsafe food preparation) and maternal health, education and status can contribute to stunting. For example, World Bank assessments identify water and sanitation as having significant correlations with stunting in Timor-Leste, as well as a plausible causal impact on it.[33] This suggests that disease burden is a contributor to stunting outcomes and is consistent with the lack of investment in water and sanitation in Timor-Leste. For example, the share of the population with access to improved sanitation facilities declined in rural areas from 2007-2015 and now stands at 27%.

***High skilled workers* –** The demand for higher skilled workers in particular is not being met in Timor-Leste. MCC's firm survey implemented in July-August 2017 found human capital to be the second most frequently identified constraint (behind access to finance). Analysis of the 2014 Living Standard Survey by the World Bank found the lack of available skills to be most critical at the level of tertiary education; returns to income from attaining tertiary education in Timor-Leste are exceptionally high at 45%, compared to a return of 15% in the median country.[34]

When local workers do not have the necessary skills, firms are more likely to hire expensive expatriate workers. The 2014 Enterprise and Skills Survey found this was indeed the case, citing that close to 40% of managers and 30% of professionals were foreign nationals. Some businesses have reported having to hire twice as many expatriates to fill their staffing needs as is typical in similar operations in the region. In the 2016 World Bank investor survey, 60% of investors responded that improving their ability to obtain visas for expatriate workers was an important action the government should take (the highest frequency among the potential actions listed). Many firms went on to comment explicitly that visas were critical because of

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[30] As measured by disability adjusted life years (DALYs), which account for "lost" years of healthy life due to both mortality and morbidity.

[31] International Food Policy Research Institute (2016). *Global Nutrition Report 2016: From Promise to Impact: Ending Malnutrition by 2030.*

[32] TLFNS 2013. 50% is less than the previous 2009-10 DHS that reported a 58% prevalence rate of stunting.

[33] Provo, A., et. al. 2016. Malnutrition in Timor-Leste: A review of the burden, drivers, and potential response. The World Bank, Australian Department of Foreign Affairs and Trade, Canberra, Australia, and the financial contribution from the European Commission.

[34] Despite significant evidence supporting the human capital constraint as described above, outstanding questions remain. In the labor market, there does not appear to be significant demand for some types of skills. For example, new programs for technical and vocational education have had difficulty finding placements for their graduates.

their inability to find skills among local Timorese. In the same survey, banks identified the poor quality of business skills among entrepreneurs as constraining their ability to provide finance.

While the evidence identifies higher-level-tertiary and related entrepreneurial skills as the most problematic, options for good quality tertiary education are available in Indonesia and elsewhere in the region. Inadequate preparation at lower levels may be preventing more students from seeking tertiary opportunities.