# Working Paper

**Economic Prospects for Trinidad and Tobago**

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**Abstract.** The oil price boom has undermined efforts to diversify the Trinidad-Tobago economy, and the wide fluctuations in oil prices have wreaked havoc with Government finances. Manufacturing has declined in relative importance and the economy is once more overly dependent on the petroleum sector. The abrupt fall in oil prices in 2015 substantially increased the fiscal deficit, and brought on chronic shortages of foreign exchange. The recent closure of the Petrotrin refinery reduces immediate growth prospects, but it alleviates Government's financing problem by eliminating the large subsidy to Petrotrin. Further fiscal tightening is needed to restore balance to the foreign exchange market; Government funding and fiscal incentives should be used to stimulate socially and commercially productive investment.

**Keywords.** Trinidad and Tobago, monetary policy, fiscal policy, exchange rate, balance of payments, oil exporting country.

**JEL codes.** E5, E6.

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The rest of the Caribbean has always dreamed of sharing Trinidad's good fortune in discovering large reservoirs of oil and gas, which are seen as a source of great wealth for the country. However, it has long been recognized that, for countries as well as individuals, access to sudden wealth brings challenges which can deprive the unprepared of the benefits they might have expected from their good fortune. In a now largely forgotten paper on Trinidad & Tobago entitled "The mechanism of an open petroleum economy"[2], the economist Dudley Seers explained the phenomenon, common in resource-rich countries, of what has become known as "Dutch disease". Because the oil industry pays such high salaries, it drives up wages in the economy generally, even in sectors such as agriculture where companies cannot afford such high wages and remain in business. This has happened in Trinidad, with the virtual disappearance of export agriculture in the 1970s, and it is typical of countries which enjoy a rapid rise of a new, very productive economic activity.

World oil prices surged in the early 1970s, creating the first modern bonanza for oil-producing countries like Trinidad. By 1980 the Trinidadian economy was much more prosperous than it had been a decade earlier, but sugar production and exports were at an end, with the economy less diversified and more dependent on petroleum-related activity. The first major macroeconomic challenge the oil dependent economy faces is to avoid over-reliance on the sector, which makes the economy less resilient. With over-dependence, the economy may be depressed by a fall-off in demand for petroleum products, strikes, accidents, stoppages in production, and the eventual exhaustion of known reserves of oil and gas.

A second major challenge for oil-dependent economies is the huge volatility of oil prices in the last 50 years. The big jump in oil prices in the early 1970s was followed, in the early years of the 1980s, by an abrupt fall, albeit not to the low levels of a decade earlier. Quite suddenly, revenues from oil and gas exports were down by one-third, and it proved impossible to implement new taxes or expenditure cuts to reduce imports by that much. In order to avoid total depletion of the Central Bank of Trinidad and Tobago's stock of foreign reserves, the TT dollar was devalued in 1983. All imports became less affordable, and the demand for foreign currency was reduced in this way.

Its petroleum bounty has exposed the economy of Trinidad & Tobago to two major challenges which less fortunate Caribbean countries have not faced to the same degree: how to use the oil bonanza when it is at its height to ensure the economy remains as diversified as possible; and how to moderate expenditures so that imports are not subject to starts and stops, and the Central Bank's foreign reserves are not depleted.

### *The Challenges of Declining Production and Volatile Prices.*

Oil production in Trinidad has been on the decline ever since the all-time peak production of 85 million barrels in 1978. Onshore oil production had reached a maximum a decade earlier, but the introduction of new off-shore production in 1972 brought a temporary recovery. By 2017, however, crude oil production had declined to 26 million barrels.

[2] "The mechanism of the open petroleum economy," Yale Economic Growth Center Paper Number 47, 1964.

The decline in refinery throughput, fed mainly by oil imported from Venezuela, was more dramatic, from a peak of 154 million barrels in 1970 to just 27 million barrels by 1983, the lowest annual total. Since then production has recovered, slowly and erratically, to 48 million barrels in 2017.

The production and throughput falls in the 1970s were masked by the dramatic surge in world oil prices between 1973 and 1981, from less than US$3 per barrel to more than twelve times that price (US$40 per barrel). Trinidad & Tobago experienced a petroleum-induced bonanza in the 1970s, which produced, among other benefits, large savings on the current account of Government's operations. Wisely, the Government headed by the eminent Dr. Eric Williams "determined to set aside a large portion of the windfall for investment in new lines of production" (Worrell, 1987, Page 153).[3] This fund was used to invest in the creation of large-scale industrial capacity, in order to diversity the economy's sources of earning foreign exchange. The projects included a deep water port and industrial estate at Point Lisas, an ammonia production facility, iron and steel production, fertilizer production, and a major expansion in electricity generating capacity.

There was much criticism of the ambitious scale of the investment programme at the time. It stretched the country's implementation capacity, and there were major cost overruns. Most plants ran at a loss initially, and even in 1987, when I wrote about the investment, it was still unclear whether the long term viability of the investment programme was assured. However, by the late 1980s it was accepted that the investment decision was a far-sighted one. The investments were on a scale large enough to provide a meaningful complement to the petroleum sector, and to forge a path in competitive export markets. By 1990 the Trinidadian manufacturing sector was the regional powerhouse, and Trinidad was a major exporter of some specialised steel products to the US, among other achievements. Although the petroleum sector was still the largest, contributing 17 percent of GDP in 1990, manufacturing accounted for a respectable 11 percent.

A decade later, however, manufacturing had sunk into relative insignificance, as the economy once again tilted toward the petroleum industry. In 2000 the petroleum sector provided almost 30 percent of GDP, compared to only 6 percent for manufacturing. Once again the deciding factor was the oil price, which had fallen from US$40 in 1981 to US$15 in 1986; by 2000 the price had doubled, to US$30 per barrel. Even then there was little warning of what was to come in the new millenium, with oil prices reaching a peak of US$100 per barrel by 2008.

The dramatic surge in oil prices caused a ballooning of the petroleum sector, with spinoffs for Government activity and other domestic services, driving rates of growth from 4 percent to as high as 15 percent between 2000 and 2008. This is illustrated in Figure 1. Once again, as in the 1970s, Government set up a fund, the Heritage and Stabilisation Fund, to capture a portion of the surplus revenue for investment in activities that would complement the petroleum sector, and provide some resilience in case of declining oil revenues. By 2014, just before the world oil price tumbled from US$90-100 per barrel, the Fund had accumulated US$5.8 billion, equivalent to 22.8 percent of GDP.

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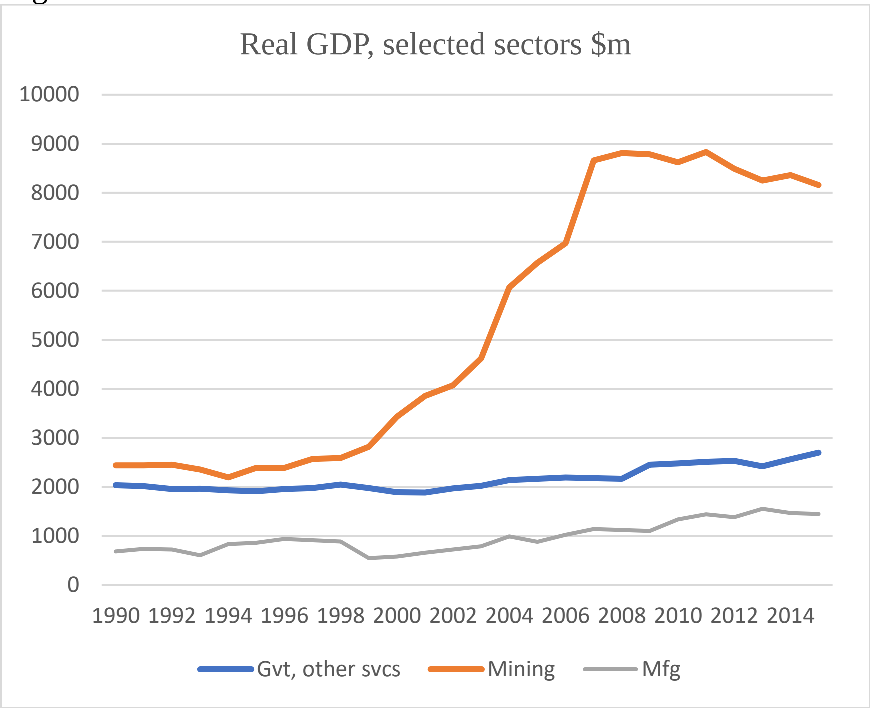
[3] Worrell, DeLisle, *Small Island Economies*, New York, Praeger Publishers, 1987.

Figure 1.




On this occasion, the Trinidad-Tobago Government was less ambitious than in the 1970s, choosing to place most of the accumulated funds in financial instruments, in foreign currency, with less emphasis on infrastructure and building productive capacity. Government did invest more heavily in transport and other infrastructure, but there was nothing on the scale of the industrial experiment of the 1970s. In the short run this proved to be helpful, because Government was able to withdraw from the Fund to ease pressure on foreign reserves when the oil price boom came to an end. However, it could be argued that this was at the expense of long term investment in upstream activities to increase value added from the country's natural resources, and to correct the imbalance caused by the oil boom. In effect, the windfall from the boom years was used to smooth out consumption, rather than to expand the capacity to produce future growth.

***Fiscal responses to the oil boom of the 2000s***

The key to successful response to economic circumstances in small open economies is appropriate use of fiscal policy tools. This is true whatever the circumstances. The challenges for Trinidad and Tobago have been somewhat different from those of other Caribbean countries. Elsewhere the Global Recession was the most influential event; in Trinidad the volatility of oil prices proved an even greater challenge. The question of interest is how well fiscal policy in Trinidad-Tobago was tailored to cope with the stresses resulting from the wide swings in oil prices.

In theory, the best approach to sudden good fortune such as the oil price boom is to assume that the bonanza is temporary, and add the entire windfall to savings, avoiding any fiscal expansion. If, as time passes, it turns out that the increase is in fact permanent, the accumulated savings can then be directed to priority areas of public service and investment. However, if the boom is short-lived, fiscal policy continues without major readjustment when revenues revert to the previous trend.

However, in practice there are always urgently needed services and supplies which have been put on hold pending the availability of funds. Inevitably, therefore, there will be some increase in spending, and savings will be less than the amount of Government's windfall tax receipts. What matters for fiscal sustainability is how much of the windfall is saved, and how these savings are employed. Is the additional spending biased toward Government consumption, or towards infrastructure or other fixed investment?

Trinidad and Tobago's most recent oil bonanza became apparent in 2003, and lasted until 2014. Oil prices rose from US$26 to US$49 in 2003, rising exponentially in every subsequent year thereafter to 2007. Prices remained in the vicinity of US$90-100 per barrel until 2015, when prices fell to US$49 per barrel, with a further decline in 2016.

In this instance, the oil windfall in Trinidad-Tobago was not associated with an increase in the investment ratio. On the contrary, investment during the oil boom years (about 13 percent of GDP) was substantially lower than in the 1990s, when the ratio was in the region of 20 percent. Actual investment in dollar terms increased by as much as 50 percent between 2003 and 2014, but this was a much slower pace than the rate of expansion for the overall economy.

The start of the oil windfall period brought exponential growth in Government revenues, which continued to 2008. Government expenditures also grew rapidly, but a healthy overall surplus was maintained, allowing for contributions to the Heritage and Stabilisation Fund. Both revenue and expenditure rose faster than GDP, with the revenue ratio increasing from 23 percent to 28 percent of GDP. In 2009, for the first time since the oil price windfall began, Government revenue fell short of expenditure. Expenditure exceeded revenue for most years after that. Expenditure was cut by one third in 2015 and 2016, but revenue fell by a similar amount, and the overall deficit persisted.

Government made a substantial contribution to capital formation out of the proceeds of the windfall, up until 2009. Government's capital expenditure rose from one percent of GDP on average in the 2001-2005 period, to a peak of 7 percent of GDP in 2009. That increase of 6 percentage points of GDP was one-half the total increase due to Government spending; the other half of the windfall proceeds was spent on Government consumption. In the contractionary period that followed, the axe fell more heavily on capital expenditure, which was cut by 4 percentage points of GDP, whereas overall spending was reduced by only 3 percentage points of GDP. Capital expenditure appears to have stalled when revenues fell and overall deficits emerged.

As in the early 1980s, the abrupt fall in oil prices from 2015 onwards once again presented difficulties in maintaining growth with a balance of foreign receipts and payments. During the years of escalating oil prices when expenditure was held below revenue, the contributions to the Heritage and Stabilisation Fund would have seemed quite reasonable. However, with the benefit of hindsight we now realise that it would have been more prudent to contain expenditure to a much lower upward trajectory, and to have avoided the wrenching expenditure cuts since 2015, cuts which have still not restored a balance of external payments.

The Trinidad and Tobago Government missed an opportunity to dampen expenditure in a decisive fashion, when an overall deficit first emerged. Expenditures were cut in 2009 and 2010, but when Government revenues recovered in 2010, subsequent expenditure increases resumed at the former pace. Within 2 years expenditures were well ahead of revenues, and they accelerated until 2014, by which time revenue had already begun to fall.

The emergence of an overall fiscal deficit led to an increase in net credit to the Government by the Central Bank of Trinidad-Tobago. Net credit increased by 11 points of GDP between 2008 and 2012, and was the major factor in the increase in the monetary base of 12 percentage points during that period.

***The foreign exchange market***

The insufficiency of the fiscal response to declining oil prices is reflected in the tightening of the foreign currency market in Trinidad-Tobago. Sales of foreign currency to the public have exceeded purchases by widening margins in the last five years. The Central Bank's foreign reserves declined from a peak of US$11.5 billion at the end of 2015 to US$7.8 billion in June 2018, a fall of one-third. The TT dollar lost 5 percent of its value in US dollars in 2016.

Although there are no Central Bank controls on foreign financial transfers in Trinidad and Tobago, the exchange rate does not respond to foreign currency shortage in the way most economists expect. That is because the Central Bank is able to overpower the private market with its oil-derived supply of foreign exchange, should it choose to do so. If instead the Central Bank is niggardly in supplying foreign currency to banks, those who need foreign currency prefer to stand in queue for whatever is made available, rather than pay a premium to obtain the dollars they need more quickly. As a result, to those who have no knowledge of the institutional context, the TT dollar exchange rate looks like a fixed peg, even though the Central Bank does not actively intervene to eliminate shortages of supply.

No relief should be expected from foreign exchange shortages in the near term, unless a strong upward surge in oil prices is sustained. In the more likely event that oil prices continue to be as volatile as they have been in recent years, further fiscal tightening will become necessary. There is an iron law of the open economy, that fiscal tightening is always essential, where the supply of foreign exchange is insufficient to meet the demand. In time, the supply of foreign exchange may be augmented by investing in new production capacity and increasing productivity, but in the meanwhile demand has to be reduced.

The preferred tool for reducing aggregate spending in the economy, and the demand for imports, is fiscal policy: a reduction in Government spending, increases in taxation, and reducing borrowings from the Central Bank. Central Bank lending adds TT dollars to the income stream, but no foreign currency to support the resulting import demand. The populations of most small open economies prefer fiscal tightening to the alternative which is commonly recommended by economists, that is, the devaluation of the domestic currency. In the small open economy, devaluation closes the foreign currency gap by reducing expenditure, by the same amount as would be cut using fiscal policy. That is so because devaluation does nothing to increase the supply of foreign exchange, so the demand side has to bear the entire brunt of adjustment to the available supply, as with the use of fiscal policy. However, devaluation has harmful side effects which may be avoided with the use of fiscal policy. Devaluation worsens the distribution of income, because wealthier people have access to US dollars, and may more effectively shield themselves from spending cuts. Devaluation also worsens the investment climate, and may lead to flight of capital abroad.

With the wisdom of hindsight we can now see that a somewhat more circumspect Government spending policy would have been needed to avoid the feast and famine cycle in the foreign exchange market. In particular, the increase in subsidies provided by Government went from 9 percent of GDP in the early 2000s to 17 percent in 2016. The fact that the investment ratio declined during the boom suggests that this expenditure was biased against investment.

***The fiscal situation is now unsustainable***

Large persistent foreign reserve losses and a chronic shortage of foreign currency are evidence that the fiscal deficit is unsustainable. The underlying imbalance between an insufficient supply of foreign exchange, compared to the demand for imports, will not self-correct. The projected increases in oil prices, and in the production of oil and gas, will leave a large unsatisfied demand for foreign currency. A devaluation of the TT dollar will not increase the supply of foreign currency in the market, and it is not the preferred method of reducing demand. Devaluation would have to be large, sufficient to raise the prices of imports to a level that would make a quantity of imports less affordable. Those on the margin would have to do without.

The preferred option for for achieving the required reduction in imports is via the use of fiscal policy. The use of an appropriate mix of tax and expenditure measures allows Government to target the imports to be reduced more precisely. Extra taxes can be imposed on luxury items, and expenditures can be switched around to deflect heavier burdens from falling on the most vulnerable groups.

***The economic growth forecast, 2018-2022***

The economic forecast depends heavily on the prospects for petroleum and related products, and the downstream exports which are based on them. They account directly for one-third of the national product, and indirectly they have a major impact on distribution, transport and other services. Output of crude petroleum has been falling since 2012, but refinery throughput is now on the increase.[4] On the basis of recent price and output trends, methanol exports are projected to be on a level, exports of urea are forecast to rise at 5.5 percent per year, and output of ammonia in projected to increase slightly.

Forecast outputs of the distribution sector, and of the business and financial services sector, are derived from the projections for petroleum and related activity, based on relationships observed over the years. The remaining sectors, including manufacturing and transportation, are forecast

[4] But see the addendum.

on trend. All told, this gives us a forecast growth rate of 1.9 percent in 2018 and 1.7 percent in 2019, rising to 2.4 percent in the following years.

In this scenario exports are growing by close to 3 percent per year by 2022, thanks to energy and associated products. Other exports account for only 10 percent of the total. Foreign direct investment is projected at US$0.7 billion, which is the average annual investment for the period 2009-2017. There is a deficit balance on services and transfers in the balance of payments, which runs at about US$1 billion each year. On the payments side of the external accounts, the import relationship to GDP is based on recent experience. Together these forecasts yield an overall balance of payments deficit for 2018-2022 which fluctuates between US$0.7 billion and US$0.9 billion, and a cumulative foreign reserve loss of US$4.1 billion.

***Foreign currency shortages could worsen if the fiscal deficit is not reduced***

Projections are that Government will run large fiscal deficits, about 9 percent of GDP each year for the next five years, if Government expenditure is not cut. We assume that Government revenue will be about 25 percent of GDP, the ratio that was recorded in the 2016/17 Fiscal Year. Oil revenues were as much as 18 percent of GDP in 2006, but by last fiscal year they had fallen to just 6 percent of GDP. Non-oil revenues were 15 percent of GDP in 2006; by 2016/17 they had risen to 19 percent.

Government expenditure is projected at slightly less than 34 percent of GDP, the average for the last two fiscal years. Expenditure has been brought down somewhat from 2013/14, when it was 38 percent of GDP. The largest element of expenditure is subsidies, which were as high as 21 percent of GDP at one time. They are projected at 17 percent of GDP. Government's wages bill is 6 percent of GDP, and purchases of materials, equipment and services are slightly less than 5 percent. The interest Government pays on its borrowings will increase, as Government borrows more every year to help finance its deficit. Government's capital spending is forecast to increase gradually by about US$105 million over the five years to 2022, ending at about 3 percent of GDP.

The large and persistent Government deficit projected over the next five years threatens to deplete the Central Bank’s foreign reserves as well as funds set aside in the Heritage and Stabilisation Fund. That is what makes the current fiscal policy unsustainable. Over TT$4 billion has been transferred from the HSF in the last two fiscal years. Between the end of 2015 and December 2017 the Central Bank of Trinidad and Tobago contributed TT11.4 billion to the financing of the Government deficit. The expenditures which are funded by this additional money result, sooner or later, in a demand for more imports, and the foreign exchange with which to purchase them.

The situation which faces policy makers in Trinidad and Tobago is that, on its present course, the economy will probably grow in real terms, but the chronic foreign exchange shortage will persist. There are two sources of excess demand for foreign currency: 1) the overall balance of payments deficit, running at around US$1 billion; and 2) the additional demand for imports arising for the large fiscal deficits that are financed by loans from the Central Bank in local currency.

In the short run, that is to say this fiscal year and the next, the fiscal deficit should be reduced by an amount sufficient to bring the demand and supply of foreign exchange into balance. Tax increases and expenditure cuts of about 1.9 percent of GDP will be needed in fiscal 2019/2020, based on current projections. At the same time, initiatives to boost tourism and the production of exports should be intensified, with a view to increasing the earnings of foreign currency, from 2021 onwards. Investments now starting and projected cannot be expected to record substantial earnings before then. Measures that might be considered include financing of tourism and export investment from the Heritage and Stabilisation Fund, and carefully designed tax incentives, conditional on the achievement of foreign earnings targets.

***Addendum***

On August 28 Petrotrin, the company which operates Trinidad and Tobago's only petroleum refinery, announced that it will end refinery operations and begin a restructuring process on October 1. The impact of the closure, and whether there is any prospect of reviving the refinery on a more modest scale, remain unclear. The closure will have cascading effects on energy output, employment, foreign exchange earnings and Government revenues. These in turn will have secondary effects on wholesale and retail operations and personal and business services. On the other hand, the elimination of the large Government subsidy to Petrotrin will make a substantial contribution to the fiscal correction needed to balance foreign currency inflows with expenditures. The short term impact may be to wipe out much of the GDP growth we have projected for 2019, but the payoff may well be higher productive capacity in three to four years. That will be the case if the resources previously being sunk to cover Petrotrin's losses are invested in activities that have a positive social or commercial return. Such investments could include infrastructure, tourism or internationally competitive exports.