# Reducing the current account deficit in Barbados

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# Introduction

- With some notable exceptions, most Caribbean economies have recorded current account deficits over many years

- From a national accounting perspective, this means that a country spends more than it earns
    $$C + G + I > GNP$$

- It also means that a country invests more than it saves
    $$I > S = GNP - G - C$$

- From another point of view, it means that a country is borrowing from abroad or selling domestic assets
    $$NFA_{t+1} < NFA_t$$

- In all cases, the deficit has be financed through some combination of selling domestic assets abroad, borrowing from foreign sources or selling of foreign reserves

# Good or bad?

- Not necessarily, a current account deficit is a bad thing.
  E.g., if the excess in spending is used for profitable (tradable)
  investments, then the borrowed funds/foreign investors can be
  repaid at some point

- However, if most of the spending is used for consumption
  (non-durable), then a current account deficit can be dangerous and
  become unsustainable over time

- To the extent that the current account not only includes trade but
  also net investment income $CA = X - M + i \cdot NFA$, too much
  foreign borrowing can become the driver.
  Example - Brazil in 1986 recorded a trade surplus of $X - M = 8b$ but the current
  account deficit was large $CA = -5b$, because of over-borrowing $i \cdot NFA = -13b$

## Current account, Barbados 1986-2017



Source: Central Bank of Barbados
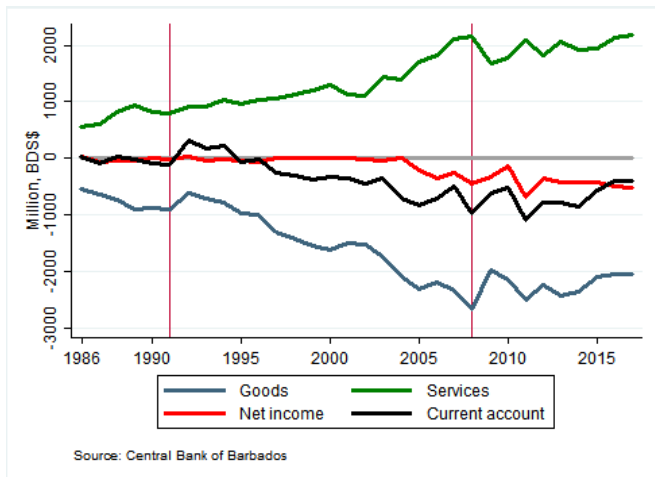
Accumulated, the current account deficits since 1995 amount to 140 percent of today's GDP

The current account ($CA$), capital/financial account ($KA$) and official reserves ($OR$) are related as follows

$$CA + KA \;=\; \Delta OR$$

E.g., in 2014 the central bank lost $89m$ of international reserves

$$-866 + 777 \;=\; -89$$

In 2015, it lost $125m$ of international reserves

$$-577 + 452 \;=\; -125$$

In 2016, it lost $246m$ of international reserves

$$-411 + 165 \;=\; -246$$

$\Rightarrow$ Both sides ($CA \downarrow$ and $KA \uparrow$) can solve this problem

# Solutions

- The literature provides some possibilities in addressing current account deficits or balance of payments problems

- The more 'drastic' measures include

  - External devaluation: $E \uparrow$ hoping that $CA \uparrow$ by $X \uparrow$ and $M \downarrow$
  - Internal devaluation: $W \downarrow$ hoping that $CA \uparrow$ by $X \uparrow$ and $M \downarrow$
  - Fiscal deval.: $\tau^p \downarrow$, $VAT \uparrow$ hoping that $CA \uparrow$ by $X \uparrow$ and $M \downarrow$
  - External default: $i \cdot NFA \uparrow$ so that $CA \uparrow$

- In any case, the effects will only realize over time and depend on the elasticities of export demand, export prices, import demand and import prices with respect to each measure

- Each of these measures has externalities.
  E.g. an external devaluation in an economy heavily dependent on imports will pass-through to inflation (which can erode the benefits from external competitiveness); or a heavily indebted country will be likely to face negative balance sheet effects

## Milder solutions: $P^* \downarrow$

- A milder solution to the current account deficit could focus on the price of imports $P^*$

- By switching import markets to less expensive countries, the import bill can be reduced (if import demand is not too elastic)

- $TB^* \uparrow = (P/E)X_D(P/E) - P^* \downarrow M_D(E \cdot P^*)$

- Assessing the impact of such a measure requires data on bilateral trade and on relative price levels across countries

- We will use data from UN Comtrade and World Development Indicators (WDI) + International Comparison Program (ICP) compiled by the World Bank

# Imports by country & distance, 2017

# Relative price levels (US=1)
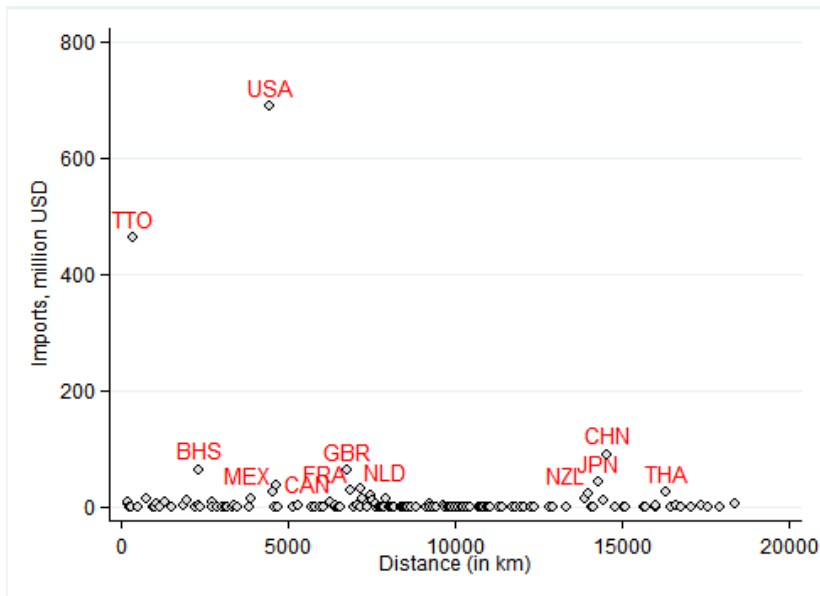
## Simulation of reduction in import bill

- The total value of imports is equal to

$$
\begin{aligned}
M &= M_{US} + M_{TT} + M_{UK} + \cdots \\
&= p_{US}X_{US} + p_{TT}X_{TT} + p_{UK}X_{UK} + \cdots
\end{aligned}
$$

- Observing the value of imports $M_i$ (UN Comtrade) and relative price levels $p_i$ (WB), we can calculate the import quantities $X_i = M_i/p_i$

- Next, we can simulate the value of imports if e.g. all imports were switched to Mexico:

$$
M' = p_{MX}X_{US} + p_{MX}X_{TT} + p_{MX}X_{UK} + \cdots
$$

- Assuming that the quantity of imports remains constant, the import bill would fall from 1618 million USD to 1231 million USD

- The previous simulation has some shortcomings

- The relative price levels are averages over a large number of commodities (food, clothing, fuel, industrial supplies, ...)

- Therefore, one has to decompose imports by country and commodity + take into account relative price levels of different commodities.
  E.g., fuel has an international price and applying a low price level for Trinidad will overestimate the potential reduction in the import bill

- In the next step, we decompose imports by country and commodity (UN Comtrade) and use relative prices for each commodity (International Comparison Program, World Bank)

- There will still be some measurement error, because some commodity price levels include the cost of services.
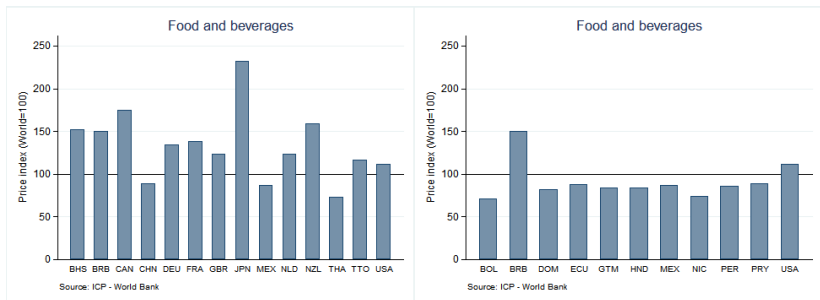  E.g., transport includes the cost of cars and public transport.

# Imports by commodity, 2017
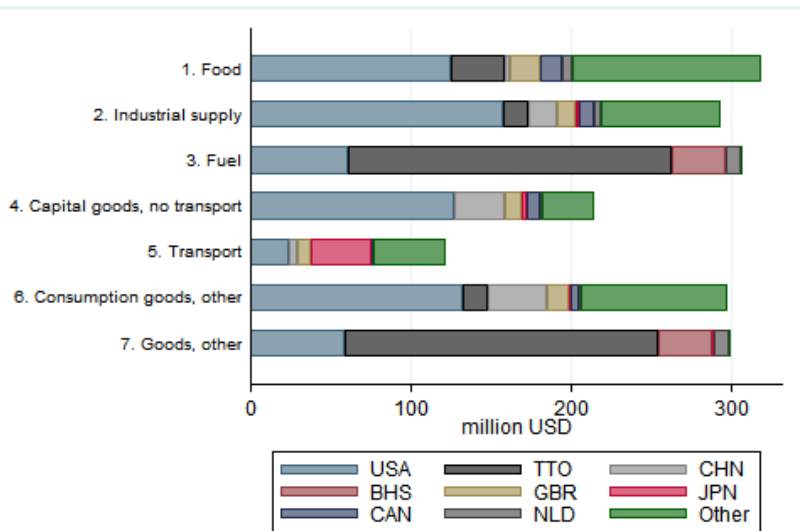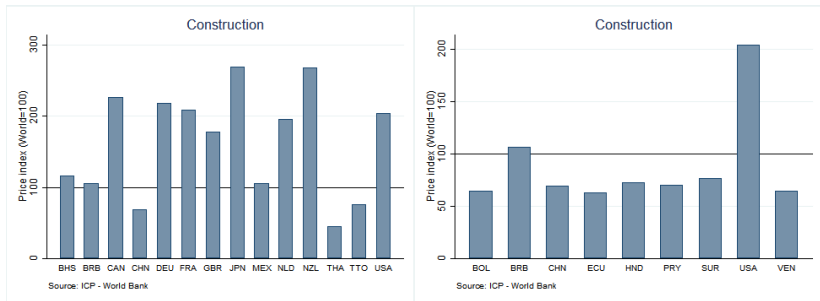


Source: UN Tradecom

## Food - relative price, major vs alternative markets



For example, switching the food imports from the Top-12 to Bolivia would reduce the food import bill from 245 million USD to 148 million USD
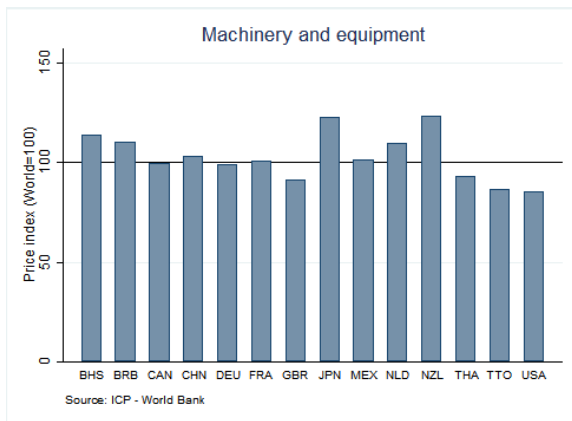
# Industrial supplies - relative price, major vs alternative markets



For example, switching industrial supply imports from the Top-12 to Suriname would reduce this bill from 233 million USD to 112 million USD

# Capital goods - relative price, major markets



The US seems to be a competitive import market

- The preliminary results suggest that finding more competitive import markets can result in important reductions in the import bill and improve the purchasing power of Barbadians

- One would have to screen for potential partners that would supply and distribute these goods

- Even though the analysis is broad and subject to a number of measurement errors and assumptions, it can serve as a first estimate

- Quality considerations and consumer/producer preferences play an important role

- Language barriers exit too

- Exchange rate risk (against appreciation) could be mitigated by currency futures (USD vs import market currency) or by choosing a competitive market with an indirectly fixed exchange rate

# Other solutions (I)

- The final price of an imported good is
  $P = E \cdot (1 + FX) \cdot P^* \cdot (1 + M^{Duty}) \cdot (1 + L^E) \cdot (1 + VAT) \cdot (1 + C)$

- Import duties $M^{Duty}$ are often 20%, but many exceptions apply.
  E.g., agriculture (40%), furniture (60%), T-shirts (115%)

- Import duties $M^{Duty}$ can help to keep imports low, protect domestic
  industries and increase government income, but they reduce
  consumers' purchasing power and external competitiveness (when
  imports are used in production)

- The final price for exported goods is $P/E = F(P^*, w, M^{Duty}, VAT)$

- In our view, reducing import duties and harmonizing them (e.g. a
  flat rate of 15%) can have an overall positive effect on the balance
  of payment

- This would be the case, if the positive effects (increasing external
  competitiveness, attracting foreign investment) outweigh the
  'negative' effects (making imported goods cheaper)

## Other solutions (II)

- Not only reforms on the current account can solve the problem, but also reforms on the capital account

- According to the Chinn-Ito index on the degree of capital account openness, Barbados has low capital account openness (25th percentile of the World distribution)

- However, capital account openness seems only weakly associated with higher FDI and PI (see graph next slide)

- This points to other factors determining capital flows

- Finally, there is a role for currency swaps which could allow to purchase and sell foreign currency at two different points in time

- However, one would have to find counterparties that need BBD for a year before converting them back again

- If this would be possible, one could use the foreign currency to invest abroad (e.g. US or DE stock markets), make a return and convert it back for repayment

# Capital flows and capital account openness, 2000-15
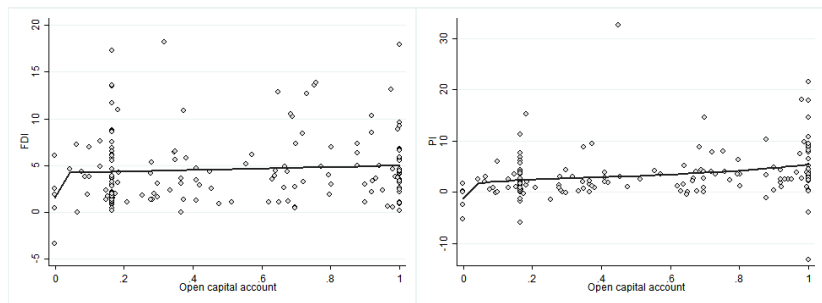
## Conluding remarks

- To the extent that the Barbadian economy depends heavily on imports, which means that import demand is relatively inelastic, the more 'drastic' measures (external devaluation, fiscal devaluation) may have low or even adverse effects on the economy

- In this study, we simulated the effects of a less 'drastic' measure in the form of switching import markets from expensive to less expensive countries

- The effects depend on the good items considered

- They are large for food and industry supplies but not for capital goods and fuel imports

- Further investigation has to be conducted on the feasibility of such a measures, as preferences of both consumers and producers will only change over time