



CENTRAL BANK OF
TRINIDAD & TOBAGO

Dutch Disease in Trinidad & Tobago: Then and Now

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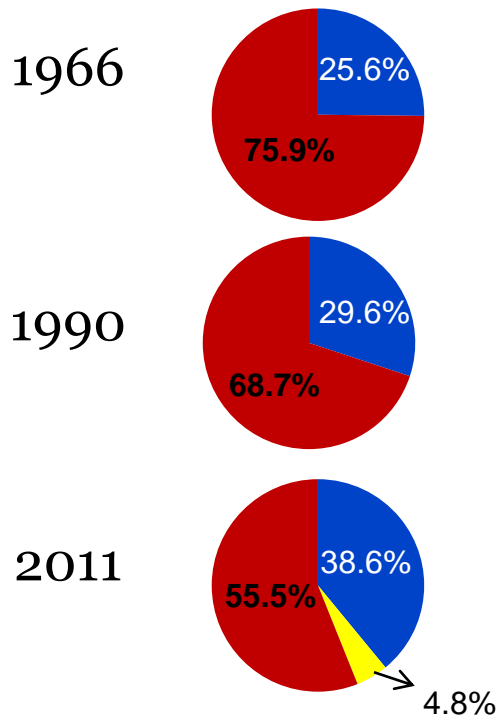
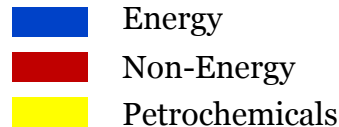
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What's the relevance of Dutch Disease?

Trinidad & Tobago: Sectoral Contribution to GDP



Source: CSO

Economic Contribution – Energy Sector, 2011

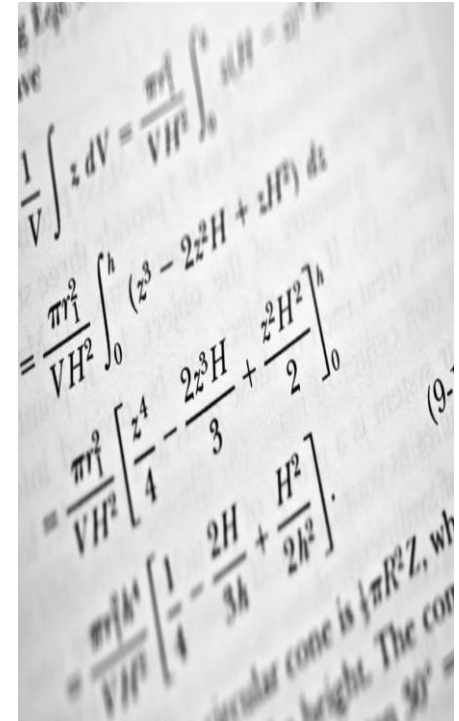
% of GDP	45.3
% of Government Revenue	57.5
% of Exports Receipts	82.3
% of Total Employment	3.0

Sources: CSO and Ministry of Finance

- The 'Dutch disease' deals with the side effects of a boom in a large important sector on the rest of the economy.
- In Trinidad and Tobago the heavy concentration in energy warrants a check-up for such effects.

Trinidad & Tobago presented a “classic” case

- i. A large oil sector with a price boom in 1970s
- ii. Transmission via government budget
- iii. Relative prices changed in favor of nontradeables
- iv. Factor rewards followed suit
- v. Factors moved into nontradeables
- vi. (Non-booming) tradeables sector squeezed
- vii. Post-boom problems due to rigidities—not easy to reverse patterns created during boom times!



e.g. Hilaire, “The Effects of Trinidad & Tobago’s Oil Boom on Relative Prices, Wages and Labour Flows”, *Social & Economic Studies* (1992)

So what's the story 25 years later?

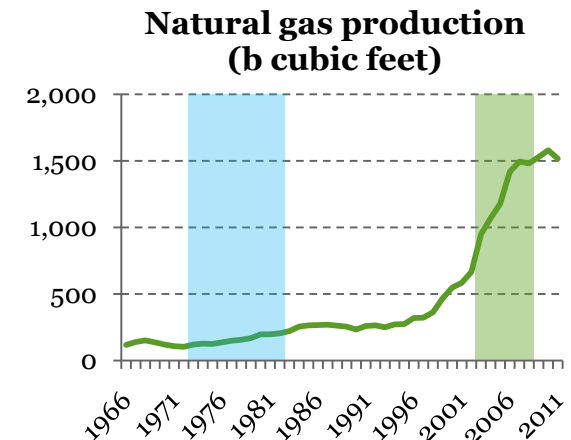
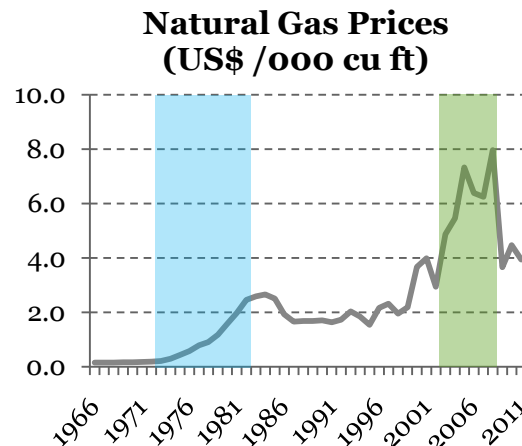
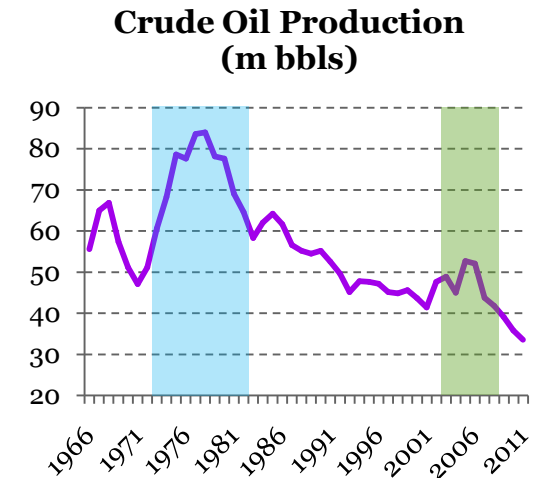
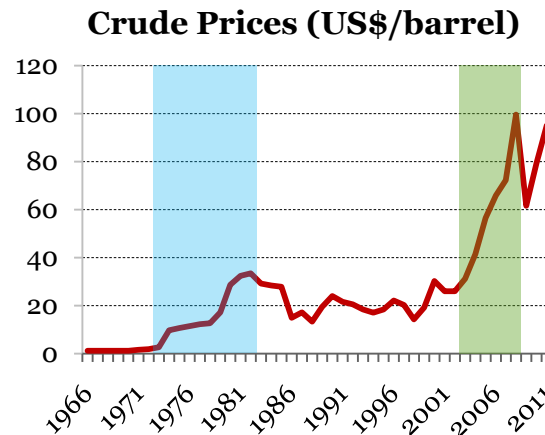
- There was another boom in the 2000s.
- Did the Dutch disease hit again?*
- In answering this let's compare:
 1. Characteristics of the 2 booms
 2. Fiscal activity
 3. Relative price changes and extent of real appreciation
 4. Wage and labour movements
 5. Changes in the structure of the economy
- Based on this, let's see what lessons there could be for the future.



*A related question is posed by Céspedes and Velasco “Was this time different?: Fiscal Policy in Commodity Republics” , mimeo September 2011.

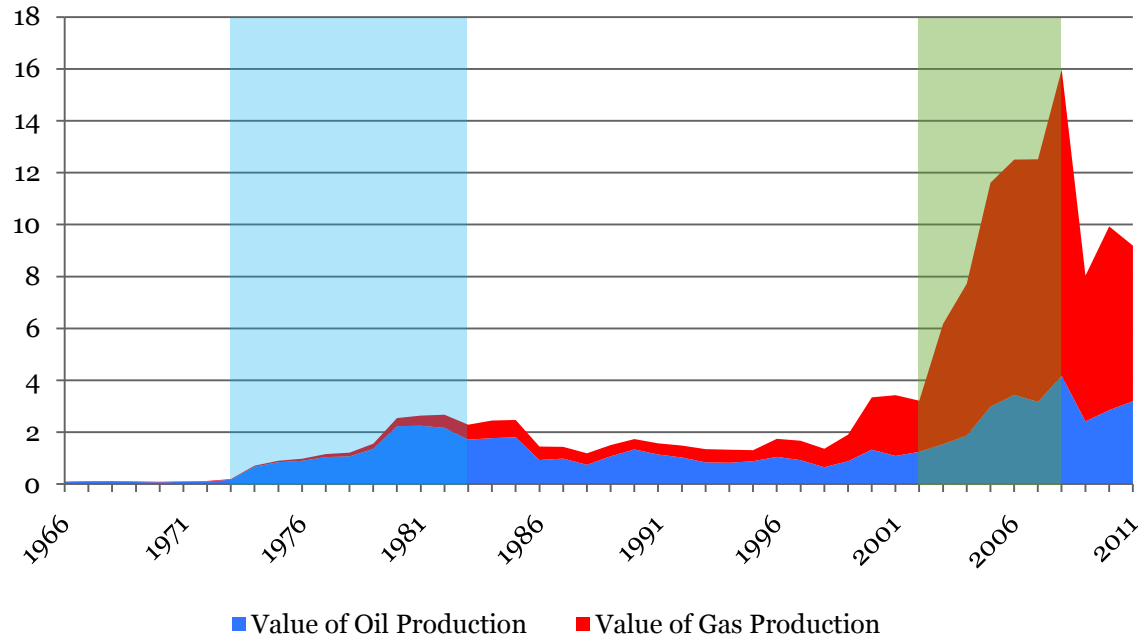
1. There were similarities but also differences in the origin of the second boom

- Boom I (73-82) was based on an oil price shock and incorporated an increase in oil production
- In boom II (02-08) oil prices also jumped but oil production slipped
- Moreover in boom II there was a surge in natural gas production and prices.



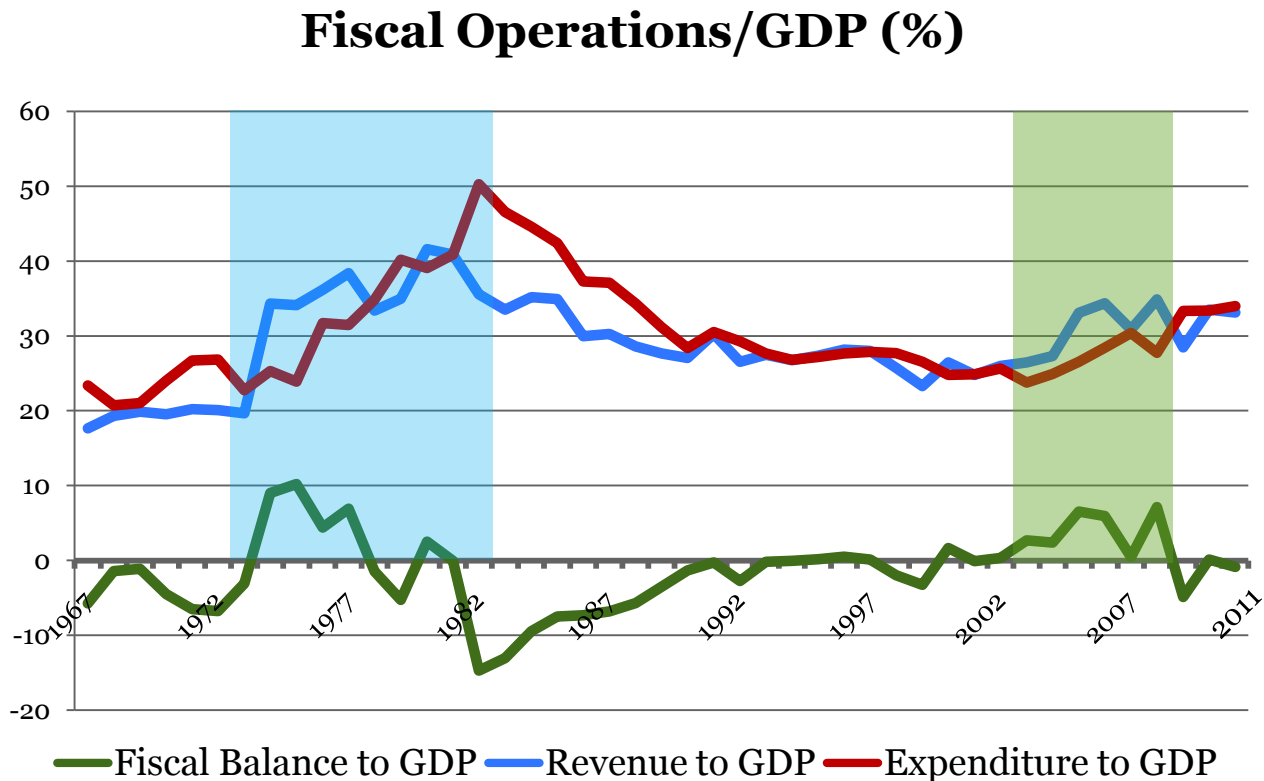
Overall, the gas effect dominated boom II

Value of Oil and Gas Production (US\$ b)



- Boom II was also shorter and less ‘intense’ (compared to the immediate pre-boom period) than boom I:
- Average value of oil/gas production in boom I was 1,335% above the preceding 3-year average; in boom II it was 233% above the preceding 3-year period.

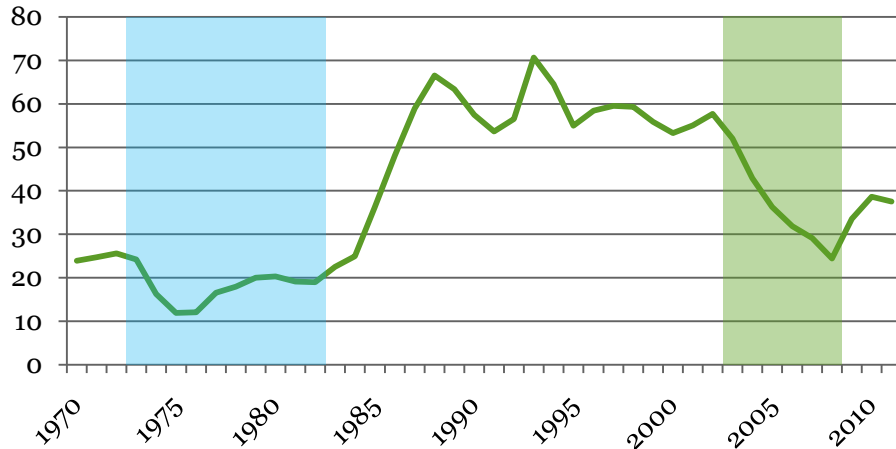
2. Fiscal policy remained countercyclical



- In both cases, revenue jumped immediately
- The increase in expenditure occurred with a lag
- For the most part surpluses were built up during the boom episodes.

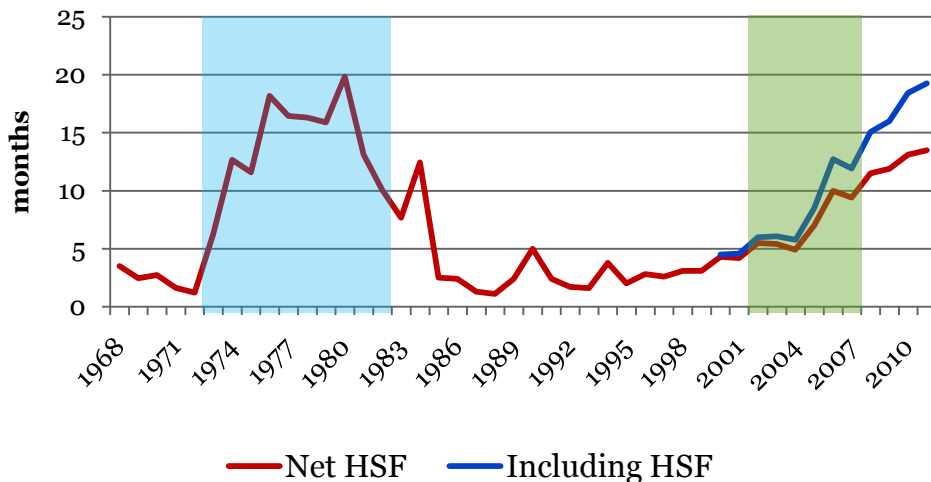
Fiscal policy appeared to adjust more quickly following boom II

Debt to GDP Ratio (%)

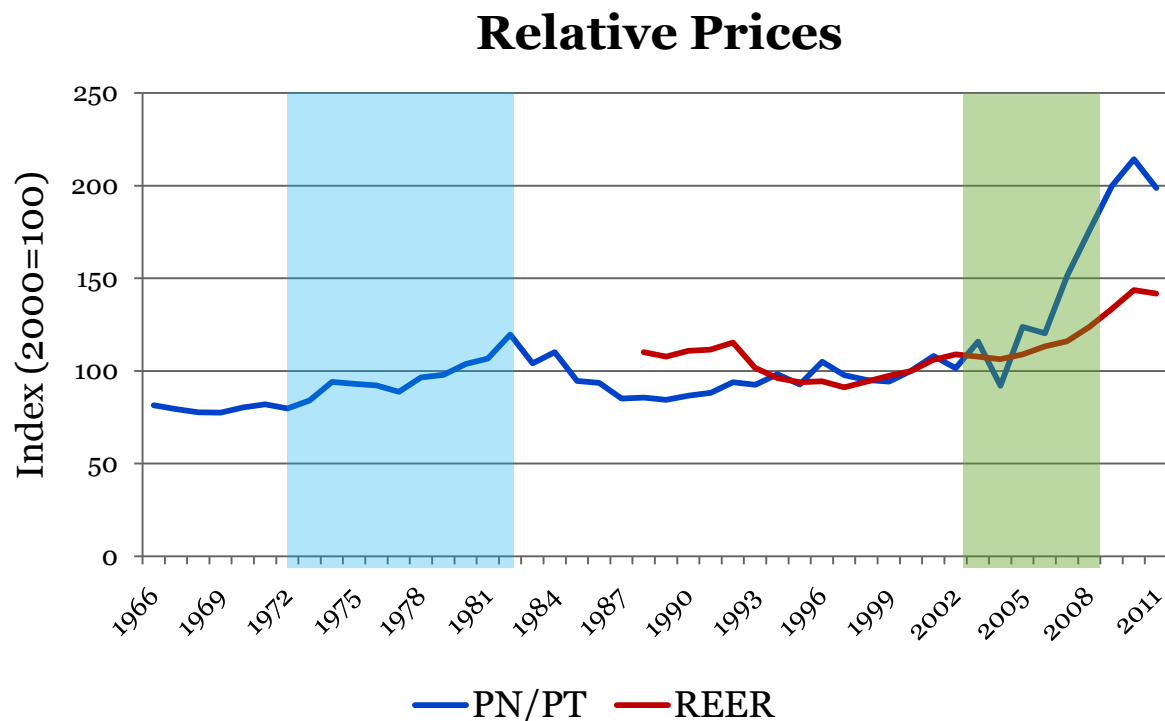


- This suggests measures were taken to avoid some of the volatility experienced in the wake of boom I.
- The approach to building up of buffers was reflected in the path of public debt, international reserves and the setting up of a Heritage and Stabilization Fund.

Import Cover Ratio (mths)



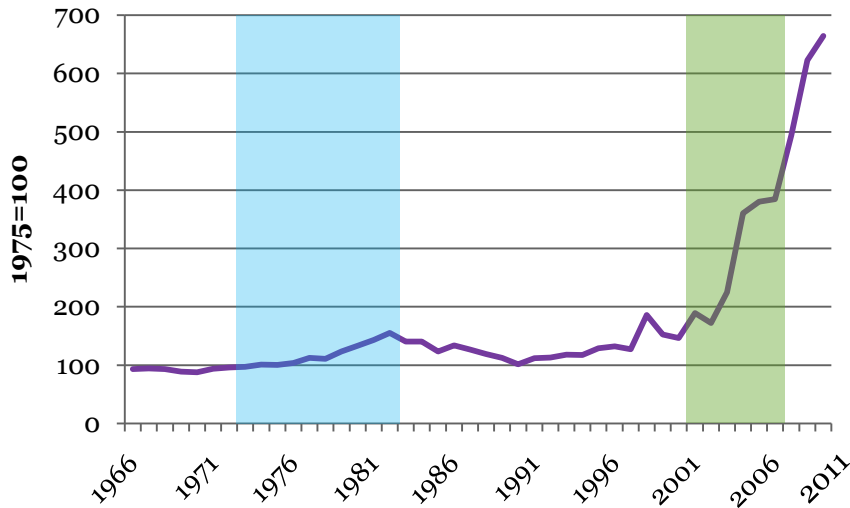
3. Relative price changes once again favored nontradeables



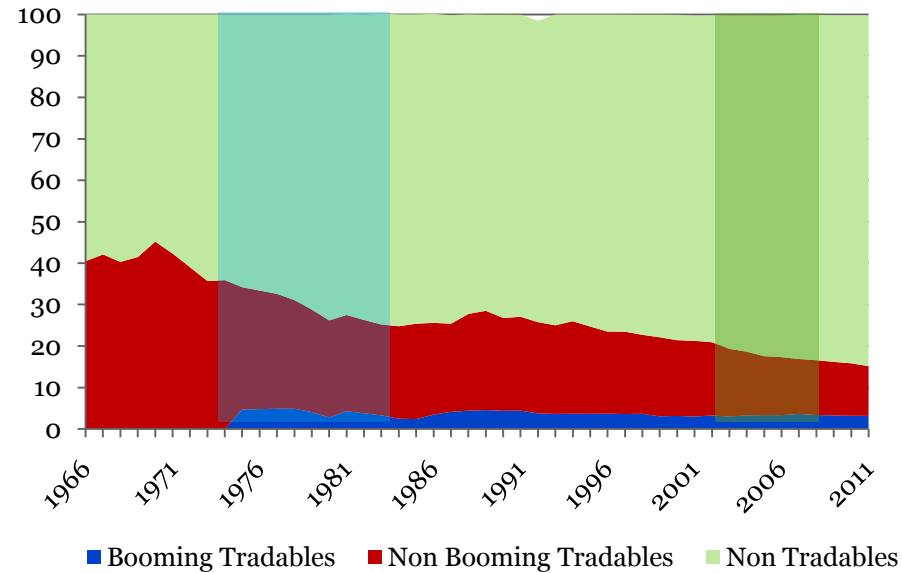
- Prices of nontradeables versus non-energy tradeables rose in boom II but not as sharply as in boom I: 42% compared to 140%.
- Real effective exchange rates appreciation was also less in boom II partly because of the flexible exchange rate regime.

4. Wage differentials encouraged more workers into nontradeable activities

Relative Wages (WN/WT)



Sectoral Share in Employment (%)

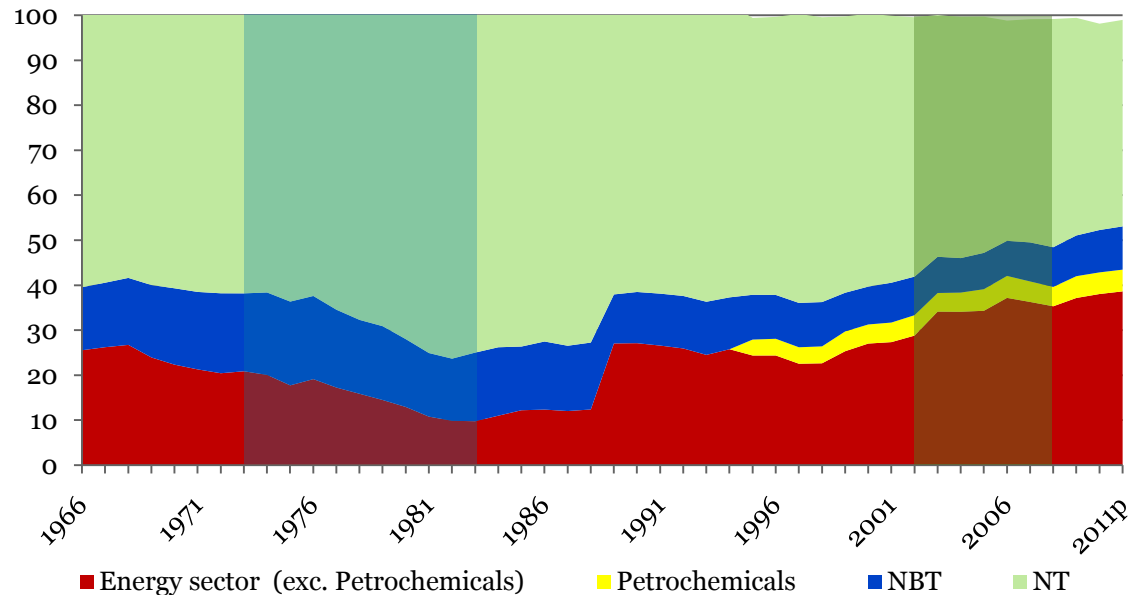


- The wage differential between nontradeables and tradeables increased by 28% over boom 1 and by 143% over boom II.

- This provided an incentive for further movement of workers towards nontradeables.

5. Tradeable activities did not appear to cede ground to nontradeables in boom II

Sectoral Contribution to Real GDP (%)



- In boom I, ‘tradeables’ comprised mainly agriculture and manufacturing.
- In boom II, not only did this ‘traditional’ tradeables sector not lose much ground but there were new tradeables added—mainly petrochemicals.

Some reasons for this difference:

- The characteristics of manufacturing had changed markedly over the course of the booms, in particular:
 - in boom I manufacturers operated under heavy protective barriers (negative lists, other import restrictions etc.);
 - by boom II they had become open to international competition and the extent of real appreciation was lower.
- By boom II, public investment in natural gas based industries—petrochemicals, iron and steel etc.—had added to the range of tradeables being produced.
- These new industries benefitted from a comparative in natural gas production, but their link to energy output could also potentially represent a longer term vulnerability.

Overall, how do the two booms compare?

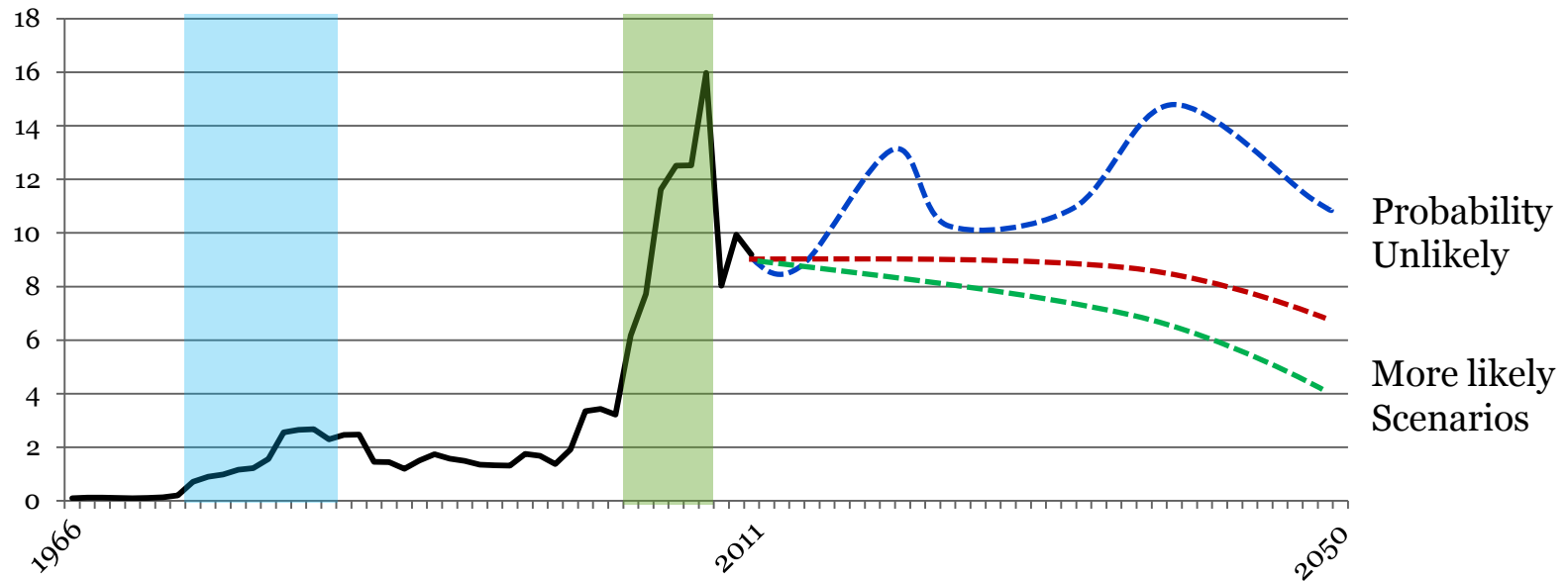
1. Boom 2 was shorter, more based on natural gas than oil and less 'intense' than boom 1.
2. Fiscal policy was countercyclical across episodes, with greater savings helping to build stronger buffers at the end of the second boom.
3. The extent of real exchange appreciation and price movements in favor of nontradeables was less in boom II.
4. Wage movements in both booms favored nontradeables and helped to attract laborers to these activities.
5. By boom II, the existence of a tradeables sector that was more open to competition as well as new natural gas based industries helped to limit the potential squeeze to tradeables activities predicted by the theory.

So, what does this mean for the future?



Can we expect another boom of the nature of the ones experienced?

Value of Oil and Gas Production (US\$ b)



- Future major and sustained surges in oil/natural gas prices are unlikely.
- Nonrenewable resources have a finite lifespan, but more intense exploration and new finds can smooth out the decline.
- It would be better to build policy utilizing the gains from the booms while treating them as if they would not reoccur.



Thank you for your attention.