



# FAQ 'DUTCH DISEASE'

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**ADDRESS**

Clingendael 7, 2597 VH The Hague, The Netherlands  
P.O. Box 93080, 2509 AB The Hague, The Netherlands

**TELEPHONE**

+31 70 374 66 16

**TELEFAX**

+31 70 374 66 88

**EMAIL**

[ciep@clingendaelenergy.com](mailto:ciep@clingendaelenergy.com)

**WEBSITE**

[www.clingendaelenergy.com](http://www.clingendaelenergy.com)

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# ‘DUTCH DISEASE’

Dutch disease is often associated with a broad array of socio-economic difficulties arising from large natural resource discoveries, mostly energy sources, and the subsequent development for domestic and international markets.

The name refers to the economic consequences of the large natural gas find in the Netherlands in the late 1950s, and the resulting positive balance of trade, the strengthening of the currency and rising wages. The name was first used in an article in weekly ‘the Economist’ describing these economic impacts of natural gas and oil developments on the broader economy of the Netherlands in the 1960s.

## THE NETHERLANDS

The strengthening of the currency of the Netherlands, the guilder, reduced the competitiveness of non-natural gas exports on international markets, and thus reduced the volume of exports of these goods, while imports also increased because foreign goods became relatively cheaper as a result of the appreciation of the guilder. Employment in those non-natural gas sectors (manufacturing) was as a result also affected, because foreign markets were harder to service and competition from foreign goods on the domestic market increased. Furthermore, the expansion of natural gas production and exports in the Netherlands coincided with on going trade liberalisation in the world and in particular in the European Economic Community (EEC), also exposing non-natural gas sectors to more competition. The increase in government income eventually also led to higher wages in the government sector and in larger social expenditures.

## RESOURCES CURSE

‘Dutch disease’ is the name used to refer to *these specific economic consequences* of natural resource exploitation, while the broader term, ‘**resource curse**’ or the ‘**oil curse**’ also refers to the much broader aspects of becoming a resource-rich country. The latter aspects also cover the socio-economic, political and institutional aspects of resource wealth. In many countries, rent-seeking behaviour of elites is also associated with resource wealth, including corruption, indicating that the gains of resource wealth are often unequally distributed in resource producing countries. Moreover, in countries where government income depends nearly completely on resource sector income (royalties, taxes and dividends) and less on income taxes, the government and/or the bureaucracy becomes divorced from interests of the electorate, reducing the maintenance or development of the necessary political checks and balances. Government resource wealth can therefore easily serve special interests, mostly those of the elite or certain parts of the elite.

## **LOOSE USE OF TERMINOLOGY**

While economists usually use the definition with some precision, referring only to the economic and monetary aspects of the phenomenon in combination with the phrase Dutch disease, in more popular publications, media and politics, all the different aspects are usually grouped together while loosely naming the phenomena either resource or oil curse or Dutch disease. It is the loose usage of terminology that has created an association, through Dutch disease, of the Netherlands with some of more political and socio-economic, perhaps less salient, aspects of the phenomena usually described under the resource curse. Nevertheless, also in the Netherlands the surge of natural gas income of the state had a profound impact on society.

## **MANAGING STRUCTURAL CHANGE**

The loosely used terminology has thus created some confusion about the wider phenomenon, thus laying a causal link between the excesses experienced in some oil producing countries and the Netherlands. As a matter of fact, countries that only suffer from Dutch disease, but not from the broader impacts, could be regarded as relatively successful in managing the political and socio-economic effects of being a natural resource net-exporter. The countries around the North Sea, the Netherlands, Great Britain and Norway, all suffered from Dutch disease to some degree, but compared to other oil and gas-exporting countries in the world fared relatively well, although their economies had to structurally adjust. The same can be said about a number of states in the United States, where oil and gas production plays a major role. The diversity of the economy usually shielded the economy for the socio-economic and political more malignant effects of resource exploitation. Nevertheless, in the 1980s and 1990s concerns in for instance Texas increased over the dependency of the local economy on oil production, while in countries around the North Sea, employment in labour intense manufacturing sectors shrank, perhaps at a quicker pace than in other economies that only had to cope with lower tariff structures as a result of trade liberalisation.

## **MANAGING GOVERNMENT INCOME**

The Netherlands experienced the upsurge in its resource sector in the 1960s, when most of the European economies were expanding, while the United Kingdom and Norway saw their oil sectors take off in the economically more difficult 1970s and early 1980s. Nevertheless, all three countries benefitted from the increase of oil prices in 1973/74 and 1978/1979, in terms of increasing oil and gas trade and government income. Yet, the way in which the wealth was distributed in these three countries also show large differences due to dissimilarities in the political system, culture and their institutional structure. The level of development of a country in terms of economic

diversity, the absorption capacity of an economy and the maturity of its institutions (both political and economic) matters a lot for the way a surge in oil or gas income can be managed.

### **EUROPEAN COUNTRIES**

The United Kingdom initially gave an important role to a national oil company to manage the state's interests, but early in the 1980s these interests were privatised. In the early 1990s, the newly privatised power sector was allowed to use gas for electricity generation, rather than coal, which greatly stimulated the gas sector in the UK. The government take was mainly managed through the tax system.

In Norway, a hybrid system prevailed with a large government share in oil and gas production. Government income increased substantially as a result of offshore oil and gas production. The production of gas is mainly for export markets because the Norwegian power system largely relies on hydro power, while the domestic oil market is relatively small compared to the production levels. Oil and gas did create a very positive balance of trade and Norway suffered from 'Dutch disease' more than the other two North Sea producing countries, the Netherlands and the United Kingdom. The oil and gas sector impacted on the wage levels in the country and made fisheries, an important sector in terms of employment, less competitive. With subsidies sectors like these were kept alive. Also the government sector increased substantially. The 'Dutch disease' impact and the vulnerability of government expenditures to oil price volatility resulted in the establishment of the Norwegian sovereign wealth fund (Government Pension Fund of Norway previously known as the Oil Fund) in 1990. It was established to shield the economy from oil and gas price volatility (buffer the economy for the impact of variable income and expenditure) and to invest oil and gas income for future generations, rather than to keep oil and gas 'in the ground' when prices were high and government income more than sufficient to cover expenditures. The Norwegian government is still holding a substantial stake in oil and gas production in the country through Statoil and also through minority stakes of Petoro.

In the Netherlands a hybrid system prevailed for a long time. The exploitation of the large 'Slochteren' gas field (also sometimes dubbed Groningen gas) was in the hands of a joint venture between ExxonMobil and Shell, but the sales of the 'Slochteren' or 'Groningen' gas (and until gas market liberalisation in the Netherlands in the early 2000s also other gas) was in the hands of a company formed by the government and the Shell/ExxonMobil joint venture partners. Gasunie, as the company was called, was a 50% government, 25% Shell and 25% ExxonMobil company, which also managed

the gas infrastructure. In the Netherlands, liberalisation implied that the government decided to unbundle Gasunie, separating trade and infrastructure. Infrastructure networks in gas (and electricity) became 100% state owned companies, while gas trade (now limited to 'Slochteren' gas only) was organised in a new company (Gasterra), with shares distributed similarly to the old Gasunie venture. Through Energie Beheer Nederland (EBN), a state owned company, the Dutch state co-invests in other oil and gas upstream ventures through minority stakes.

In terms of expenditure, the Dutch government absorbed the 'gas income' into the state budget and only very late after the start of gas exploitation decided to set aside part of that income for structural investments (Structural investment Fund, FES). These structural investments included infrastructure and education, meant to support the competitive strength of the Dutch economy and prepare the economy for a lower or post-gas income period. Nevertheless, investments in structurally strengthening the Dutch economy remained modest, compared to the social expenditure and the income from gas over the period since gas production began. When gas production began a special fund was contemplated, but the income was at first considered too low for such an effort. When the income from natural gas became much larger than anticipated, it was already politically too difficult to change the practice of absorbing the income directly into the state budget. This was frequently debated among politicians and academics.<sup>1</sup> The example of the Netherlands underpin the notion that government itself grows as a result of resource income growth. Moreover, the Netherlands, with the help of gas income, created a broad social security cushion for its citizens when unemployed or sick or otherwise not able to participate in the workforce. Particularly as a result of 'Dutch disease' in combination with trade liberalisation in the 1960s/1970s and the economic downturn at that time, had created a large labour market surplus. Gas income was used in part to finance this structural surplus. With the maturity of gas production and the resultant decline of gas income, alternative sources of income to support extensive social security arrangements must be found or expenditures must be trimmed to suit government incomes.

### **DEVELOPING COUNTRIES**

If managing government income was already challenging in OECD countries such as the UK, the Netherlands and Norway, the surge in government income in developing

<sup>1</sup> Prof. F. de Kam (Feest: 50 jaar boven onze stand geleefd dankzij Slochteren) calculated that in the period 1959-2009 only 15.4% (EUR 32.5 billion) of total government gas income of EUR 211.1 billion was spent on infrastructure. Most was spent in that period on social security (24.8%; EUR 52.3 billion) and government and security (20.1%; 42.5 billion), education (9.2%; 19.5 billion), interest payments (7%; 14.8 billion), transfers to companies (6.2%; 13.1 billion), international cooperation (3.5%; 13.1 billion) and defence (3,4%; 7.2 billion). NRC 12-06-2009.



countries is even more challenging. Most of the literature dealing with the 'oil curse', describe the surge in government income after the 1973 oil crisis and the subsequent nationalisation of reserves and production in many producing countries. The Saudi oil minister of that time, Zaki Yamani, was quoted in 'Yamani: The Inside Story', about the challenges this surge in income posed to the institutional and government structure in his country, but also the challenges for the government to begin to spend this income in the domestic economy. In many oil producing countries the size of government income and the absorption capacity (and perhaps also the organisation capacity of government) of the economy was completely unmatched. Authors like Alan Gelb, Richard Auty and more recently Michael Ross and Pauline Jones Luong and Erika Weinthal have described the difficulties countries encounter on all fronts (government, education, workforce, investments, monetary, prices) to absorb a large influx of income from oil or gas (although gas income is usually somewhat lower). The analyses provide new countries with important insights on the do's and don'ts of handling increased income from resources and how to make sure that domestic benefits can be maximised (in the short and longer term). Very often the political structure and institutional make up of a country is very important too, particularly with regard to the distribution of these benefits in the economy. Too often only a small group in society benefitted, while others did not. Here experiences in Africa, Latin America and the Middle East and North Africa are not all positive. Although many countries manage to develop a positive learning curve, examples where the political, social and economic checks and balances in society were lacking or were (and still are) insufficient, are extensive.

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**VISITING ADDRESS**  
Clingendael 12  
2597 VH The Hague  
The Netherlands

**POSTAL ADDRESS**  
P.O. Box 93080  
2509 AB The Hague  
The Netherlands

**TEL** +31 (0)70-374 66 16  
[www.clingendaelenergy.com](http://www.clingendaelenergy.com)  
[ciep@clingendaelenergy.com](mailto:ciep@clingendaelenergy.com)