B3. International trade and transport flows

Introduction

Over the past two decades the spread of a global supply chain has allowed trade to grow exceptionally fast. Containerisation promotes globalisation by reducing the cost of shipping goods so sharply that manufacturers can afford to search the world for factories where costs are lowest. The result is that the amount of sea transport involved in manufacturing a given product has risen. Next, ongoing innovation and diffusion of technology in the transport sector has lowered transaction costs and increased the demand and supply for transportation capacity. The developments are most pronounced in the container trade, which had grown tremendously since the mid-1970s. Vessels become gigantic, with the latest capable of carrying 15 thousand standard containers. On a global scale, the Netherlands is an important link in the hub-and-spoke model of transport flows of goods to and from Europe feeding into other modes of transport and creating all kinds of related economic activities and network effects. Associated businesses and suppliers are benefiting from each others presence and competing with each other for share of the market.

The objective of statistics on transport flows is to provide a basis for the assessment of the impact of international allocation of resources. The data also facilitates the monitoring over-time of decreasing trade barriers and the gradual integration of economies and the increasing technological possibilities within the context of globalisation. Overall, the land, water, air and supporting activities generate nearly 23 billion euro of added value to the Dutch economy and employing over 360 thousand persons.

Definitions

For tables B3.1 and B3.2 *emerging markets* include Argentina, Brazil, Chile, China, Czech Republic, India, Indonesia, Israel, Malaysia, Mexico, Poland, Romania, Saudi Arabia, South Korea, Thailand and Turkey. The criteria for selection of the emerging markets are described in chapter A2.

Non-emerging markets are defined as all the countries in the world minus the Netherlands and minus the selected emerging markets.
EU-15 includes member states Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxemburg, Portugal, Spain, Sweden, United Kingdom and the Netherlands.
EU-14 is defined as EU-15 minus the Netherlands.

New member states includes Bulgaria, Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia, and Slovenia.
EU-26 is defined as EU-27 minus the Netherlands.

Product groups are defined according to the NSTR classification:

0. Agricultural products; live animals
1. Food products and feed
2. Solid mineral fuels
3. Petroleum and petroleum products
4. Ores and metal residues
5. Metals, metal semi manufactures
6. Crude minerals and building materials
7. Fertilizers
8. Chemical products
9. Other goods and manufactures

B3.1 Average yearly growth of container transport between the Netherlands and emerging markets

Since its worldwide introduction in the mid sixties, the container has become crucial in the development of trade with (emerging) markets. In the 2000-2007 period, the average yearly growth of the container transport between the Netherlands and other countries was 4.2 percent. The emerging markets as a group had a growth rate of almost 15 percent. As a consequence, since 2000, the share of these countries in the total container transport grew from 10 to almost 25 percent. Overall, the emerging markets accounted for almost 62 percent of the growth in container transport between 2000 and 2007.

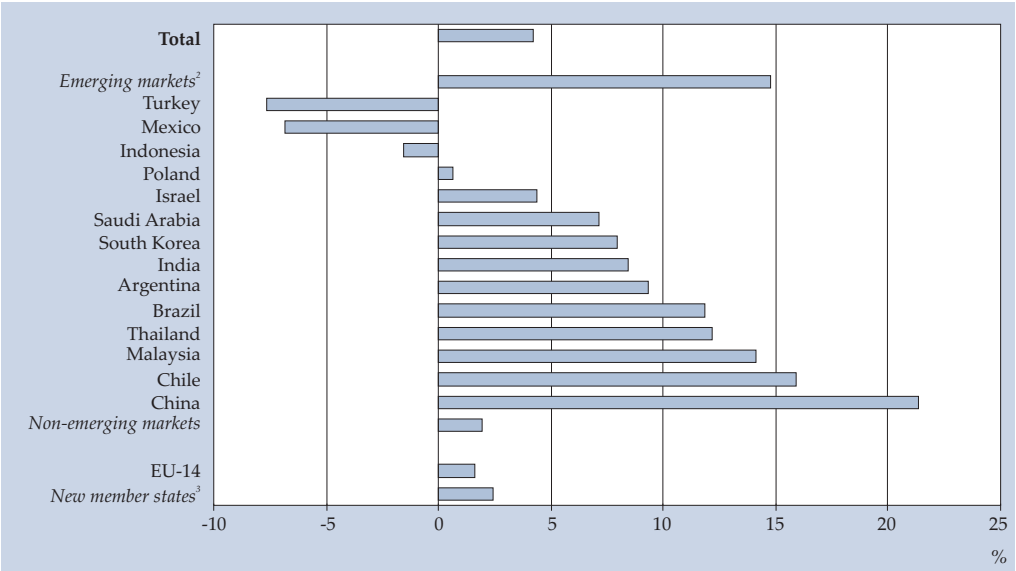
In particular the container transport between China and the Netherlands showed a high annual growth rate (21 percent). Also in absolute terms China is the largest partner country with over 1.3 million transported containers in 2007.

In 2007, Malaysia ranked as second largest partner country, surpassing Brazil and South-Korea. Nearly 20 percent of all containers, 1.7 million, are loaded or unloaded for the direction of China, Malaysia or South-Korea.

Some other countries show a decrease in container transport to and from the Netherlands. For example, for Turkey the 2007 figure was almost half of what it was in 2000.

Containers are registered according to the principle of loaded in NL and unloaded in NL.The data concern all modes of transport suitable for container transport. Data on foreign road transport companies are not included. Since 2006 data of some new railway companies are confidential. Therefore some countries are left out, but partial included in the totals. This does not disturb the picture of emerging markets. In terms of container transport, the countries overseas

B3.1 Container transport to and from emerging markets by country, annual growth rate in 2000–2007[1)]



[1)] In 2007 container transport by rail is not included.
[2)] Including Czech Republic and Romania.
[3)] Excluding Poland, Czech Republic and Romania.

Table B3.1
Container transport to and from emerging markets by country

	2000	2001	2002	2003	2004	2005	2006	2007 [1)]
Total (1,000 containers)	6,414	6,235	6,379	6,424	7,268	7,918	8,369	8,829
Emerging markets [2)]	691	751	865	1,026	1,352	1,549	1,658	2,180
China	239	266	335	444	645	837	971	1,316
Malaysia	54	88	120	133	173	152	178	234
Brazil	63	75	80	109	147	128	125	172
South Korea	117	98	104	106	129	131	147	160
India	33	34	37	41	36	49	47	75
Saudi Arabia	34	34	24	27	30	38	37	57
Argentina	23	25	22	30	31	40	36	40
Chile	12	16	13	18	23	36	36	39
Poland	19	16	18	17	20	20	17	33
Turkey	32	30	34	29	18	14	16	19
Mexico	11	5	6	8	9	5	8	17
Thailand	8	8	13	8	9	27	17	9
Israel	5	5	5	5	9	7	6	5
Indonesia	21	31	34	30	42	44	15	4
Non-emerging markets	5,723	5,484	5,513	5,398	5,915	6,369	6,711	6,649
EU-26								
EU-14	3,447	3,346	3,326	3,142	3,522	3,798	3,947	3,908
new member states [3)]	2,276	2,138	2,187	2,256	2,394	2,571	2,764	2,742
Total (%)	100	100	100	100	100	100	100	100
Emerging markets [2)]	11	12	14	16	19	20	20	25

[1)] In 2007 container transport by rail is not included. The estimated number of containers is 125 thousand to 150 thousand.
[2)] Including Czech Republic and Romania.
[3)] Excluding Poland, Czech Republic and Romania.

B3.2 Transport with emerging markets

In 2006 more than 1 billion tonnes of goods were loaded and unloaded in the Netherlands in the international freight transport.
The group of 16 emerging markets accounted for almost 10 percent of the goods flow towards the Netherlands, led by Brazil. Two thirds of the load consisted of iron ore – mostly for transit through the Netherlands (see part A3).

The tonnes of goods unloaded in emerging markets is four times as high as that of the goods loaded. Even excluding the iron ore from Brazil (25.5 million tonnes), the flow of goods from the emerging countries towards the Netherlands is still nearly 3 times larger than the flow towards these countries. The emerging countries have a 14 percent share in the flow towards the Netherlands and receive only 4 percent of the goods loaded in the Netherlands. Three quarters of the transport originates from Brazil, China, Malaysia and Indonesia.

For the three emerging countries on the European continent, inland modes of transport such as inland waterways, rail, road and pipelines are the most frequently used. The maritime sector is involved in bulk transport and container transport. Intercontinental transport takes place predominantly by sea (96 percent of the total inward and 80 percent of total outward flow).

Air transport is mostly suitable for high value goods and small consignments. The emerging markets are important in the freight transport by air: 30 percent of all air freight unloaded in the Netherlands originates from these markets. China, Malaysia, South Korea and Israel have a 75 percent share in this transport mode for the emerging markets.

Air transport is suited for high value goods and small consignments. The emerging markets are important in the freight transport by air: 30 percent of all air freight unloaded in the Netherlands originates from these markets. China, Malaysia, South Korea and Israel have a 75 percent share in this transport mode for the emerging markets.

Table B3.2
Transport of goods to and from emerging markets by mode of transport and country, 2006

	Unloaded in the Netherlands				Loaded in the Netherlands			
	total	sea	air	inland modes [1]	total	sea	air	inland modes [1]
	1,000 tonnes							
Total	556,818	373,309	838	182,672	468,919	131,409	744	336,767
Emerging markets	78,771	75,783	253	2,735	19,063	15,152	192	3,719
Argentina	3,596	3,594	2	–	370	366	4	–
Brazil	37,807	37,802	5	–	1,173	1,168	5	–
Chile	2,514	2,513	1	–	245	239	6	–
China	11,788	11,686	102	–	5,921	5,863	58	
Czech Republic	773	–	0	772	1,098	–	1	1,098
India	1,836	1,819	17	–	701	693	8	–
Indonesia	4,854	4,850	3	–	179	176	4	–
Israel	860	834	27	–	191	173	18	–
Malaysia	5,078	5,047	32	–	1,247	1,230	17	–
Mexico	288	277	11	–	1,238	1,215	23	–
Poland	3,004	1,506	0	1,498	2,821	808	0	2,013
Rumania	629	187	0	442	610	20	0	590
Saudi Arabia	2,459	2,458	1	–	941	937	4	–
South Korea	1,910	1,880	30	–	1,329	1,305	24	–
Thailand	199	185	15	–	142	134	7	–
Turkey	1,176	1,146	7	23	858	825	13	19
Other	478,046	297,525	585	179,937	449,856	116,257	552	333,048

[1] Road, inland waterways, rail and pipeline transport.

B3.3 International air passenger transport

In 2007, the Netherlands ranked sixth among the other EU-15 member states with respect to international air passenger transport, with 50.4 million passengers.

In the year 2000 aircrafts carried more than 600 million passengers to, from or between the EU-15 member states, national air transport not included. Seven years later close to 850 million passengers were carried - a 40 percent increase. Partly due to the liberalisation of air transport, which resulted in an explosively rise of the low-cost-carriers that made air transport increasingly competitive compared to other transport modes, air travel boomed in the 2000-2006 period (measured in passenger-kilometres). Since 2000 the same seven EU member states (United Kingdom, Germany, Spain, France, Italy, the Netherlands and Greece) have been leading air passengers transport. The absolute number one every year is the United Kingdom with 23 percent. In this period the Dutch air passenger market share dropped 1 percent point to 6 percent, indicating that a large part of the fast growth of air passengers in the EU since the year 2003 has been absorbed by other member states.

In terms of absolute number of international passengers handled in 2007, Amsterdam/Schiphol (48 million) is the third airport after London Heathrow (62 million) and Paris/ Charles de Gaulle (54 million); and just before Frankfurt/Main (47 million).

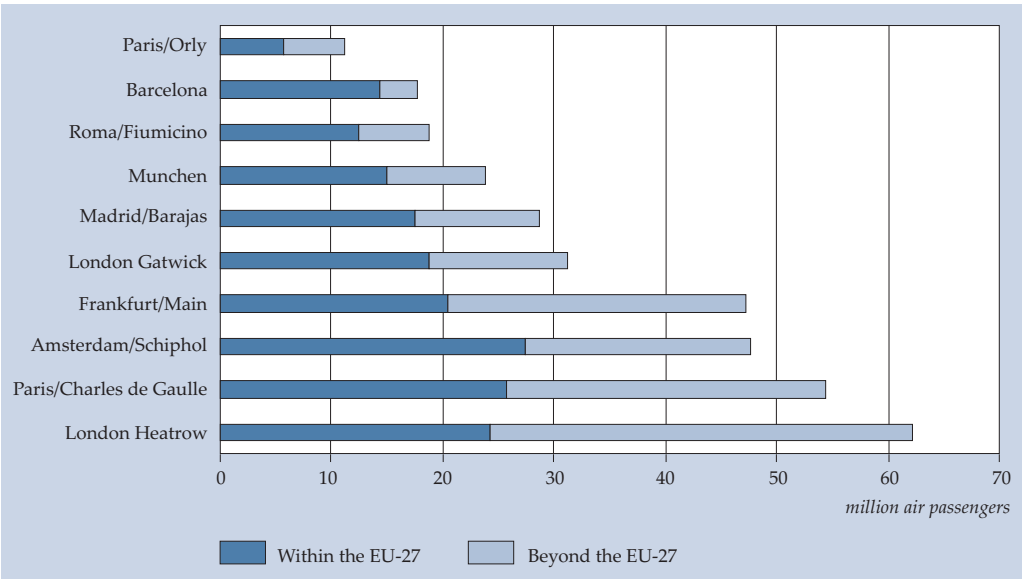
Moreover, Amsterdam/Schiphol with 230 destinations has the highest share of all international passengers handled in a specific country. 95 percent of all international air passengers to or from the Netherlands fly to or from Amsterdam. Paris/Charles de Gaulle with 227 destinations handled 59 percent of all the international passengers to France and London Heathrow with 168 destinations handled just 32 percent of all the international passengers to the United Kingdom. Note however that there are over 45 airports in the United Kingdom, nearly 60 airports in France, and just 5 airports in the Netherlands.

Information provided in this table primarily is based on On Flight Origin/Destination (OFOD) data. These were supplemented by Flight Stage (FS) data and airport declarations. Data is collected on the basis of the first origin/destination of passengers, and not the final origin/destination in case of

Table B3.3
International transport of passengers through EU-15 airports

	2000	2001	2002	2003	2004	2005	2006	2007
	million air passengers							
EU-15	605.2	603.7	602.7	630.3	694.1	747.0	794.2	847.7
United Kingdom	142.8	142.2	146.1	153.5	166.6	177.3	184.6	191.2
Germany	98.6	97.2	94.0	99.9	114.5	124.1	131.3	139.5
Spain	81.1	83.3	83.2	88.9	95.8	104.7	110.2	119.4
France	65.6	65.8	68.6	69.6	76.0	81.3	86.2	92.8
Italy	44.3	43.4	42.7	49.4	57.0	63.2	69.5	77.6
The Netherlands	40.4	39.4	40.6	41.0	44.4	46.4	48.5	50.4
Greece	24.6	24.9	24.8	23.2	24.0	25.0	26.6	28.1
Ireland	16.0	16.7	17.6	18.8	20.2	23.6	26.8	29.0
Austria	14.2	14.1	14.4	15.2	17.7	19.1	20.2	22.3
Denmark	17.1	18.0	18.2	17.8	19.4	20.5	21.2	22.1
Portugal	13.4	13.3	14.5	14.9	16.0	17.3	19.0	21.4
Belgium	21.6	19.8	14.3	15.1	17.5	17.8	19.1	20.7
Sweden	16.3	16.2	14.6	13.6	14.7	15.6	18.7	20.1
Finland	7.6	7.7	7.5	7.8	8.9	9.5	10.5	11.6
Luxembourg	1.7	1.6	1.5	1.4	1.5	1.5	1.6	1.6

B3.3 International transport of passengers through EU-27 airports; top 10 airports, 2007



B3.4 International air freight and mail transport

In 2007 the total volume of freight and mail exchanged between de EU-15 member states and the rest of the world increased 14.8 percent compared to 2005, reaching nearly 13 million tonnes. Over this period Dutch growth was 10 percent to 1.7 million tonnes. With this volume the Netherlands is the third-largest transporter of air fraight and mail among the 27 EU member states (a market share of 13 percent). The Netherlands, Germany and United Kingdom together accounted for over 50 percent of the total tonnage of air freight and mail handled by the EU-15 in 2007 (including intra-EU-15 double-counting).

Amsterdam (Schiphol Airport) is an important hub airport in transporting intercontinental goods. Most of the total volume of freight and mail handled by the Netherlands is destined to Asia and Australasia (53.5 percent of all Dutch transport of goods by air).

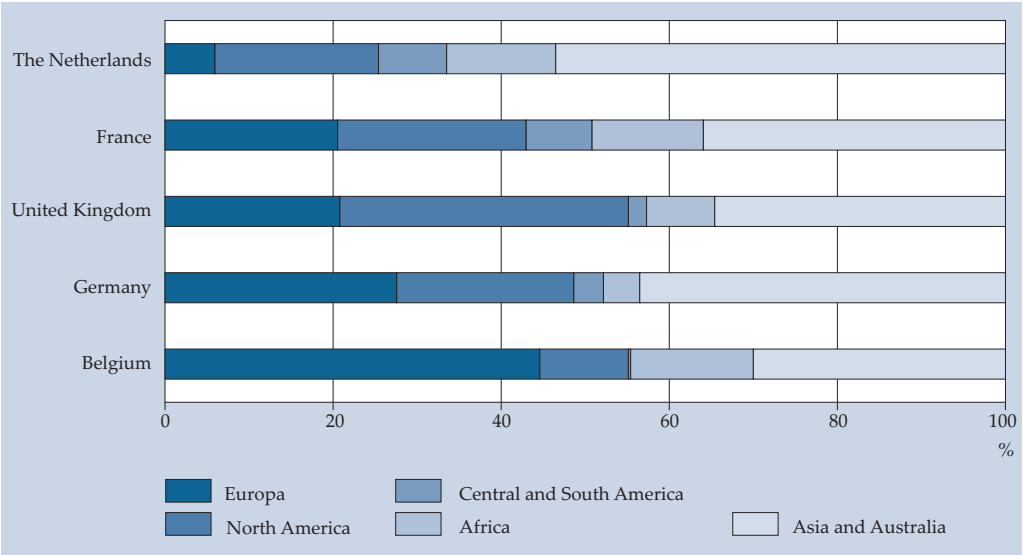
The volume of freight and mail between the Netherlands and the other European countries is relatively small. Only 6 percent of the total Dutch air transport has a European partner – compared to a European average of almost 26 percent.

The air freight and mail transport is registered according to the principle of loaded and unloaded by country, not including the national movements. The mail volume is less than 2.5 percent of the total Dutch air transport weight. Generally, the importance of air freight and mail transport grows with the distance covered. Since the same movement of goods is reported as a departure by one airport and as an arrival by the partner airport, the EU totals exclude double-counting for intra-EU international transport. Data collection is based upon the first origin/destination of freight, and not at the actual origin/destination in case of flight connections. In addition, data for France are underestimated since the two Paris airports, Charles de Gaulle and Orly, do not report all freight and mail handled. Sweden has not reported freight and mail data since 2005; data for Denmark do not include Copenhagen Kastrup airport, which explains why figures for Denmark are small.

Table B3.4
International transport of freight and mail through EU-15 airports by continent of origin or destination, 2007

	Total	Europe	North America	Central and South America	Africa	Asia and Australia
	1,000 tonnes					
Germany	3,312.2	909.2	701.7	119.8	136.0	1,445.5
United Kingdom	2,323.4	483.8	796.8	50.9	186.9	804.9
The Netherlands	1,709.2	102.4	329.6	141.7	221.5	914.0
France	1,545.2	316.1	349.7	120.8	204.6	554.1
Belgium	1,202.9	536.1	128.6	1.0	175.3	361.8
Italy	829.3	319.2	139.1	22.4	31.7	316.9
Luxembourg	702.6	86.0	127.9	30.2	71.6	386.9
Spain	400.9	180.1	66.5	107.9	14.7	31.8
Austria	205.8	68.5	20.0	0.1	1.3	115.9
Finland	141.7	74.8	7.6	0.0	0.2	59.2
Ireland	121.9	72.5	39.1	.	0.1	10.2
Portugal	108.5	64.1	6.0	25.1	12.8	0.4
Greece	89.5	65.6	7.4	.	1.9	14.5
Denmark	5.9	5.5	0.1	.	0.0	0.4
Sweden	.	.	.	.	.	.

B3.4 International transport of freight and mail through EU-15 airports by continent of origin or destination; top 5 member states, 2007



B3.5 Goods transport by nationality of the transporters

Except for a small decline in 2003, the transport of goods to and from the Netherlands has increased by 24.6 percent since 2000 to more than 1 billion tonnes in 2006. Both the transport flow of goods loaded as well as unloaded in the Netherlands grew at the same rate.

The majority of goods is transported by non-Dutch transport equipment enterprises. In 2006, 75 percent of the total unloaded weight in the Netherlands was transported by foreign transport-equipment enterprises. Of the total loaded weight more than 60percent is transported by non-Dutch transport-equipment enterprises.

Compared to all other modes of transport the Dutch participation in sea-shipping is very small. Just 3 percent of all goods to and nearly 10 percent of all the goods from the Netherlands is transported by sea ships flying the Dutch flag.

Transport of goods on inland waterways mostly uses Dutch transport-equipment. Two thirds of all carried goods loaded in the Netherlands were transported by a Dutch vessel. Over 70 percent of the goods on inland waterways unloaded in the Netherlands that passed the border (with Germany or Belgium) were shipped by inland vessels with the Dutch flag. Because of the geographical location of the Netherlands most foreign transporters in this mode of carrying goods had the Belgian or German nationality.

Transportation of goods over roads is for more than 62 percent dominated by vehicles with a Dutch registration number. The last few years we notice an increase of road transport by vehicles from Belgium, Germany and Poland. Especially the number of Polish registered vehicles is growing fast.

Goods transported by rail and pipeline, both modes of transport under 'other', are 100 percent Dutch business. Yet, about 50 percent of companies transporting air freight and mail, the third 'other' mode of transport, have the Dutch nationality. Air transport-equipment from the American or Asian air fleet makes up the other 50 percent.

Transporting goods to and from the Netherlands is not the exclusive domain of Dutch companies or Dutch transport equipment. Foreign companies with transport-equipment are competing for loading and unloading goods in the Netherlands as well.

The nationality of sea-going transport equipment is not specified by owner of a vessel, but the country of registration. A ship is said to be flying a flag of convenience if it is registered in a foreign country. Famously used flags of convenience as identified by the International Transport Workers' Federation (ITF) are those of Panama, Liberia, the Bahamas, and the Marshall Islands.

Table B3.5
Weight of transported goods by nationality of transport equipment, 2006

	Unloaded in the Netherlands					Loaded in the Netherlands				
	total	sea-shipping	inland waterways	roads	others [1]	total	sea-shipping	inland waterways	roads	others [1]
	1,000 tonnes									
Total (1,000 tonnes)	556,818	373,309	64,404	85,693	33,413	468,919	131,409	125,605	93,521	118,385
Dutch transport equipment	143,464	12,337	47,293	50,828	33,005	277,070	12,796	85,152	61,069	118,053
Foreign transport equipment	413,354	360,972	17,110	34,865	407	191,850	118,613	40,453	32,452	332
Europe	213,841	161,798	17,110	34,865	67	134,748	61,806	40,453	32,452	32
EU-14	141,930	96,460	16,280	29,150	38	107,898	43,317	38,724	25,845	9
among										
Belgium	19,277	1,710	8,405	9,160	2	23,099	1,112	14,722	7,262	3
Denmark	7,186	6,943	–	243	0	5,027	4,748	–	279	0
Germany	30,737	9,417	6,736	14,583	1	41,588	7,556	21,801	12,230	1
France	5,961	4,214	784	962	0	4,078	1,488	1,298	1,291	0
Greece	25,233	25,094	–	139	0	3,441	3,189	–	251	0
United Kingdom	31,074	30,371	1	702	1	17,178	15,987	1	1,189	1
Sweden	5,560	5,446	–	114	0	2,027	1,894	–	133	0
other European countries	71,911	65,338	830	5,715	29	26,850	18,489	1,729	6,607	23
among										
Cyprus	13,055	13,055	–	0	0	5,477	5,476	–	1	1
Malta	16,977	16,977	–	–	0	4,060	4,060	–	–	0
Norway	30,365	30,222	–	142	0	6,354	6,239	–	114	0
Poland	3,064	91	28	2,945	0	3,447	157	44	3,246	0
Russia	2,909	2,909	–	–	0	1,343	1,342	–	–	1
Africa	34,311	34,295	0	0	15	9,034	9,022	0	0	12
among										
Liberia	33,923	33,923	–	–	0	8,768	8,768	–	–	0
America	107,269	107,159	0	0	110	32,972	32,861	0	0	111
among										
Antigua en Barbuda	10,224	10,224	–	–	0	14,311	14,311	–	–	0
Bahama's	29,370	29,370	–	–	0	3,514	3,514	–	–	0
Panama	56,234	56,234	–	–	0	9,795	9,795	–	–	0
Asia	39,475	39,265	0	0	207	9,102	8,935	0	0	168
among										
Singapore	9,105	9,058	–	–	46	2,959	2,919	–	–	40
Hongkong	12,362	12,349	–	–	13	2,157	2,138	–	–	19
Oceania and others	18,457	18,453	0	0	4	5,990	5,986	0	0	4
among										
Marshall-Island	17,929	17,929	–	–	0	5,935	5,935	–	–	0
Total (%)	100	100	100	100	100	100	100	100	100	100
Dutch transport equipment (%)	26	3	73	59	99	59	10	68	65	100

[1] Transport by air, railway and pipelines.

B3.6 *Gross weight and value of Dutch import and export flows by continent of origin or destination and product group*

Dutch export largely relies on trade with the European hinterland. Globalisation is particularly noticeable when considering the import flows. In 2004, almost 40 percent of the gross weight and value of import comes from other continents than Europe. Regarding export, only 12 percent of the gross weight and 15 percent of the value is going to a non-European destination.

The gross weight of Dutch imports from Europe is dominated by petroleum and petroleum products (38 percent), crude minerals and building materials (17 percent) and chemical products (12 percent). The incoming products from other continents mainly fall in the categories petroleum and petroleum products (28 percent), solid mineral fuels (22 percent) and ores and metal residues (21 percent).

The value of import from Europe is chiefly determined by the 'other goods' including cars, electrical appliances, machines, footwear, cloths, etc. (51 percent) and chemical products (15 percent). The value of import from the farther continents is even more dominated by the other goods (65 percent). Other goods are often transported in containers (see table B3.1).

The share of non-European continents in import by product group gives an indication in what sectors of the economy globalisation is most important. Solid mineral fuels and ores are products that are particularly bought from far-away countries. For crude minerals and building materials, metals, fertilizers and chemical products the Netherlands heavily relies on other European countries.

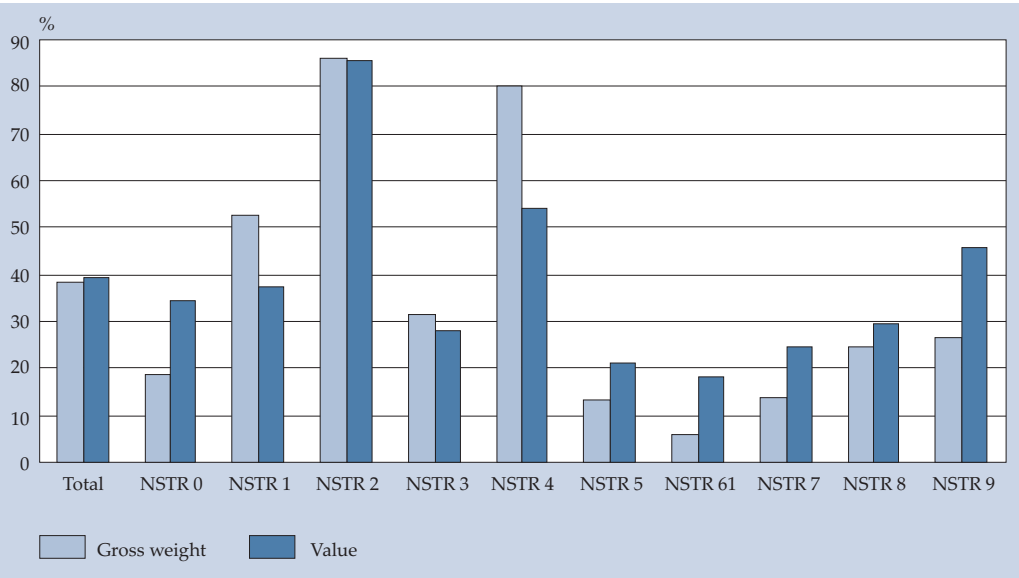
Imports and exports are expressed in gross weight (tonnes) and value (euros). This was made possible by the integration of the statistics of international trade and the statistics of transport for 2004. The integration also resulted in an estimate of transit through the Netherlands. Part A, chapter 3 contains a description of the integration research and a definition and analysis of transit flows. Together international trade and transit make up the total international transport.

Trade is defined according to the community concept: transit flows which are cleared for the EU through Dutch customs, the so-called quasi-transit flows, are part of trade. Re-exports are also considered trade.

Table B3.6
Import and export flows by product group and continent of origin or destination, 2004

	NSTR 0	NSTR 1	NSTR 2	NSTR 3	NSTR 4	NSTR 5	NSTR 6	NSTR 7	NSTR 8	NSTR 9
Gross weight (million tonnes)										
Import										
Africa	0.68	1.20	12.74	6.74	2.43	0.37	0.18	0.03	0.69	0.09
America	1.90	13.76	14.26	2.56	26.06	0.63	0.83	0.00	5.42	0.99
Asia	1.26	3.85	2.51	33.15	1.25	0.62	1.45	0.84	3.30	5.15
Europe	17.44	17.15	5.41	92.55	8.00	10.93	40.35	5.58	29.47	17.35
Oceania	0.12	0.18	4.40	0.00	2.53	0.08	0.14	0.00	0.18	0.01
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Export										
Africa	0.61	1.25	0.01	1.65	0.00	0.11	0.19	0.08	0.53	0.38
America	0.38	1.77	0.04	4.46	0.12	0.63	0.31	1.04	3.23	0.97
Asia	0.57	1.60	0.03	1.07	1.08	0.37	0.16	0.10	4.83	1.63
Europe	14.93	31.67	23.50	95.07	40.02	12.67	12.98	6.13	36.59	17.19
Oceania	0.02	0.07	0.02	0.00	0.00	0.01	0.01	0.02	0.11	0.11
Other	0.00	0.01	0.00	8.73	0.00	0.00	0.00	0.00	0.00	0.09
Value (billion euros)										
Import										
Africa	0.76	1.45	0.52	1.54	0.11	0.32	0.01	0.00	0.21	0.47
America	1.31	4.57	0.70	0.40	1.41	1.47	0.11	0.00	6.34	15.54
Asia	0.83	1.63	0.16	5.55	0.30	0.85	0.26	0.10	3.13	50.36
Europe	5.68	13.36	0.28	19.11	1.63	10.42	1.82	0.31	23.58	78.92
Oceania	0.11	0.28	0.27	0.01	0.09	0.11	0.02	0.00	0.08	0.14
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03
Export										
Africa	0.22	0.89	0.00	0.50	0.00	0.12	0.03	0.01	0.75	2.29
America	0.76	1.80	0.00	1.22	0.04	0.44	0.05	0.15	3.34	8.65
Asia	0.60	1.93	0.00	0.15	0.64	0.41	0.06	0.02	3.71	11.48
Europe	15.66	28.13	1.32	21.10	3.41	12.30	1.52	0.91	38.54	121.41
Oceania	0.03	0.13	0.00	0.00	0.00	0.01	0.01	0.01	0.22	0.74
Other	0.00	0.01	0.00	1.17	0.00	0.00	0.00	0.00	0.00	0.28

B3.6 Share of non-European continents in imports by product group, 2004



B3.7 Value-to-weight ratios for Dutch import and export flows by product group and continent in euro/kg

Table 3.7 shows the value-to weight ratios by product group and continent. The product group NSTR 9, i.e. 'other goods' including cars, electrical appliances, machines, footwear, cloths etc, contains the most valuable goods. Especially, the other goods from the distant continents Oceania, Asia and America have a high value per kilogram.

For most of the product groups, the ratios are lower for Europe than for the other continents. These results are consistent with figure B3.6, where we saw a difference between the share of non-European countries in the weight and in the value of imports.

Furthermore, the figure shows that the differences among continents are larger for imports than for exports of other goods. The other goods that are imported from distant non-European countries are more valuable than the other goods that are exported to distant countries.

Table B3.7
Value-to-weight ratios for import and export flows by product group and continent of origin or destination, 2004

	Africa	America	Asia	Europe	Oceania
	euro/kg				
Import					
NSTR 0	1.12	0.69	0.66	0.33	0.93
NSTR 1	1.21	0.33	0.42	0.78	1.52
NSTR 2	0.04	0.05	0.06	0.05	0.06
NSTR 3	0.23	0.16	0.17	0.21	7.03
NSTR 4	0.05	0.05	0.24	0.20	0.03
NSTR 5	0.87	2.33	1.39	0.95	1.37
NSTR 6	0.07	0.13	0.18	0.05	0.17
NSTR 7	0.07	0.61	0.12	0.06	7.50
NSTR 8	0.30	1.17	0.95	0.80	0.48
NSTR 9	5.46	15.75	9.77	4.55	24.23
Export					
NSTR 0	0.35	2.04	1.04	1.05	1.98
NSTR 1	0.71	1.02	1.21	0.89	1.73
NSTR 2	0.07	0.08	0.12	0.06	0.09
NSTR 3	0.30	0.27	0.14	0.22	0.89
NSTR 4	0.55	0.29	0.59	0.09	1.24
NSTR 5	1.02	0.70	1.09	0.97	1.22
NSTR 6	0.14	0.15	0.36	0.12	0.62
NSTR 7	0.18	0.14	0.22	0.15	0.33
NSTR 8	1.42	1.03	0.77	1.05	1.96
NSTR 9	5.95	8.89	7.05	7.06	6.77

B3.8 Gross weight of Dutch import and export flows by transport mode, continent of loading and product group

Two thirds of the gross weight of Dutch import is last loaded in a European country, whereas 14 percent is from America and 10 percent from Africa. About 65 percent of the imports is transported over sea. The rest is mainly shipped to the Netherlands by inland vessel (11 percent) or truck (17 percent).

The results show that most of the imported petroleum and petrochemical products (NSTR 3) arrives in the Netherlands by sea-going vessel from Europe and Africa or by pipeline from Europe. More than half of the imported ores and metal residues (NSTR 4) is transported over sea from America. Food products and feed arrive over sea from America or by truck from Europe: both are good for a share of about 30 percent.

Over 90 percent of all Dutch exports are unloaded in Europe. The transport modes used have roughly equal shares: inland shipping (24 percent), maritime transport (24 percent), pipelines (26 percent) and road transport (21 percent).

Petroleum and petrochemical products are mainly exported by pipeline (68 percent). The export of food products and feed (NSTR 2) mainly uses inland vessels (18 percent), trucks (40 percent) or sea-going vessels (22 percent). These are also the main transport modes for chemical products.

Comparing the transport patterns of trade and transit (see part A, chapter 4), we see that maritime transport from America has a larger share in incoming transit than in imports. Dutch imports consist of more agricultural and food products and less raw material like ores and crude minerals than incoming transit.

Relatively more road transport is involved in Dutch imports than in incoming transit. The same is true for exports in comparison with outgoing transit. Also pipeline transport is more often used in exports than in outgoing transit. Like imports, exports include more agricultural and food products and less raw materials than outgoing transit.

Table B3.8a
Import of goods by transport mode, continent of loading and product group, 2004

	Maritime transport					Inland shipping	Road transport	Rail transport	Pipeline transport
	Africa	America	Asia	Oceania	Europe	Europe	Europe	Europe	Europe
	1,000 tonnes								
NSTR 0	327	1,939	517	8	1,563	5,513	9,710	236	
NSTR 1	806	11,835	4,229	176	2,325	3,339	11,051	105	4,170
NSTR 2	7,584	9,936	4,843	4,149	10,058	915	1,145	6	
NSTR 3	25,397	2,075	4,617	0	73,656	5,718	668	37	14,547
NSTR 4	3,408	19,668	929	2,364	3,701	3,724	2,136	89	
NSTR 5	370	801	1,226	34	4,468	1,588	2,699	403	
NSTR 6	333	639	948	64	6,558	14,789	16,728	2,891	
NSTR 7	130	167	1,331	8	1,937	866	988	10	
NSTR 8	814	3,526	2,420	43	11,596	4,928	9,091	330	646
NSTR 9	255	2,276	4,535	115	6,789	1,550	10,193	85	

Table B3.8b
Export of goods by transport mode, continent of unloading and product group, 2004

	Maritime transport					Inland shipping	Road transport	Rail transport	Pipeline transport
	Africa	America	Asia	Oceania	Europe	Europe	Europe	Europe	Europe
	1,000 tonnes								
NSTR 0	187	257	585	23	1,541	1,373	9,109	164	
NSTR 1	408	1,025	1,620	144	7,754	6,398	14,026	537	2,916
NSTR 2	50	249	462	28	2,514	11,072	4,775	2,265	
NSTR 3	2,004	4,147	2,169	118	6,820	17,804	1,352	1,458	77,338
NSTR 4	156	1,176	2,293	100	6,221	16,059	426	2,601	
NSTR 5	44	251	90	3	2,118	2,074	5,835	2,328	
NSTR 6	63	265	271	12	2,025	10,491	6,509	165	
NSTR 7	67	943	514	33	2,983	2,482	1,539	1,634	
NSTR 8	343	2,068	3,129	94	9,154	7,069	10,372	2,011	518
NSTR 9	146	954	1,916	93	4,051	581	12,149	182	