



Ministerie van Infrastructuur en Milieu

30.Jan.15

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## Assessment of lucrative corridors and impact of belly & freighter interplay

Final report

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# Project objectives

Seabury has been engaged by the Ministry of Infrastructure and the Environment to conduct a study on “lucrative corridors” and air cargo trends affecting Schiphol and the Netherlands

Key questions of the Ministry are:

- A What are the “lucrative” air cargo corridors to and from Schiphol?
  - 1 What are the **key air cargo flows** to, from, and via Europe? What was the **position of Schiphol** and how did this develop since 2005?
  - 2 What **product types** travel via these corridors? Which products are ‘**high-yield**’ or ‘**footloose**’? Where is most **growth** expected?
  - 3 What are the effects of competition from **ocean freight** and **express carriers**?
- B What are key developments regarding freighter and belly capacity and how do these capacity types interplay?
  - 1 What is the **share of belly / freighter capacity** on the key corridors? What **product types** typically travel with full freighter?
  - 2 What **factors** influence these shares? Where is **capacity growth** expected?
  - 3 What are the **relevant capacity types required** on the corridors and for the products types that are considered as “lucrative”

Air cargo critically important for the Netherlands

Opportunities and risks in trade lanes and product groups

Highlights from shipper survey

Belly vis-à-vis freighter dynamics and position Schiphol

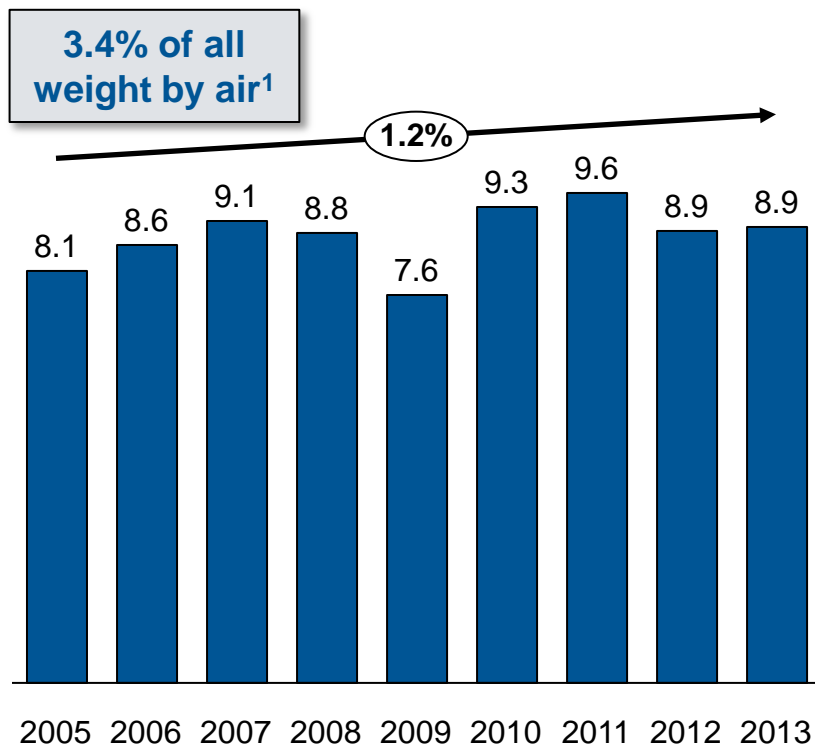
Appendix

# Air cargo industry is a critical enabler for the economy

Air cargo is a critical enabler for the economy and many industry sectors in Europe, as more than 50% of its non-bulk imports and exports come and go by air

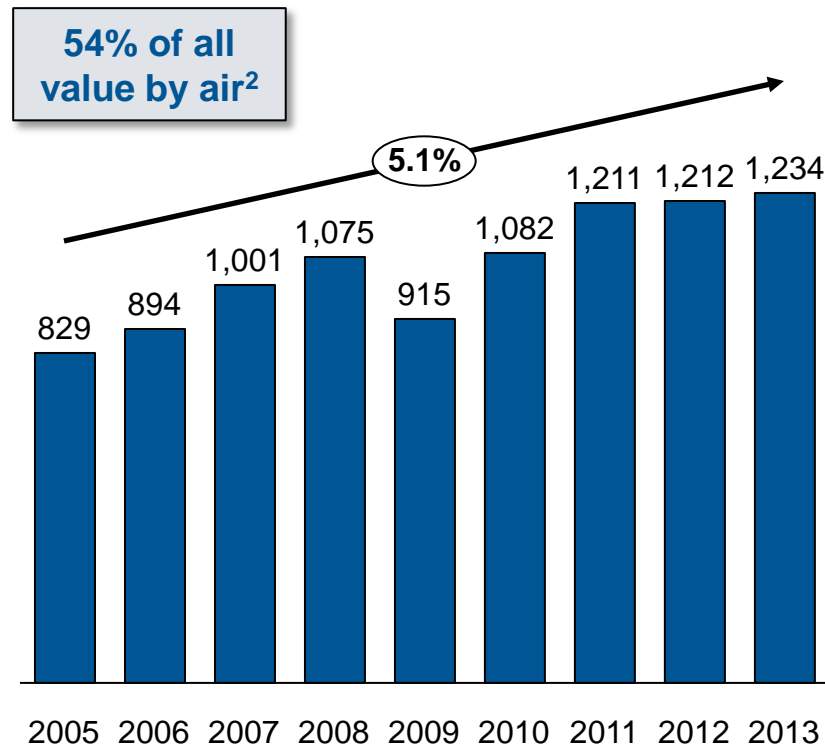
## Total air trade weight to/from Western Europe

Million tonnes



## Total air trade value<sup>1</sup> to/from Western Europe

\$ Bn



**The value of goods imported and exported by air has grown with >5% YoY**

1) Considers air trade and containerized ocean trade; 2) Air trade value refers to value of the transported goods; Source: Seabury Global Trade Database, World Yearly dataset

# The Netherlands is key in the European air cargo market

The Netherlands is “punching above its weight” in terms of trade by air and has a very strong market position in exports, and even more so in imports

**4.9%**

Netherlands share of Western Europe GDP

Netherlands represents

**4.1%** of total Western Europe population..

..while only covering **0.9%** of Western Europe's surface area<sup>3</sup>

The Netherlands accounted for

**7.1%** of 2013 Western Europe air export weight (356,000 tons<sup>1</sup>)

These Netherlands exports represented **6.4%** of Western Europe's total export value (Bn \$48)

With 694,000 tons air imports, Netherlands represented

**17.6%** of the Western Europe total

The Netherlands' total import value represented **16.2%** of the Europe total (Bn \$80)

Schiphol air cargo market share among top 10 European cargo airports is

**14%** (2013),

with a total of 1,531,000 tons traffic<sup>2</sup>

In terms of air trade the market share of the Netherlands is ~7% on exports and ~17% on imports

1) Import and export figures for both weight (tons) and value (\$) represent Netherlands trade in 2013; 2) includes double-counting of air-to-air transfer cargo; 3) Excludes Greenland; Note: Growth expressed as Compound Annual Growth Rate (CAGR); Trade value represents value of the traded goods; Source: Seabury Global Trade Database; Seabury Ocean trade database; EIU statistics (October 2014); Schiphol traffic statistics; ACI WATR 2013 airport ranking; CIA World Fact book , accessed on 22/10/2014

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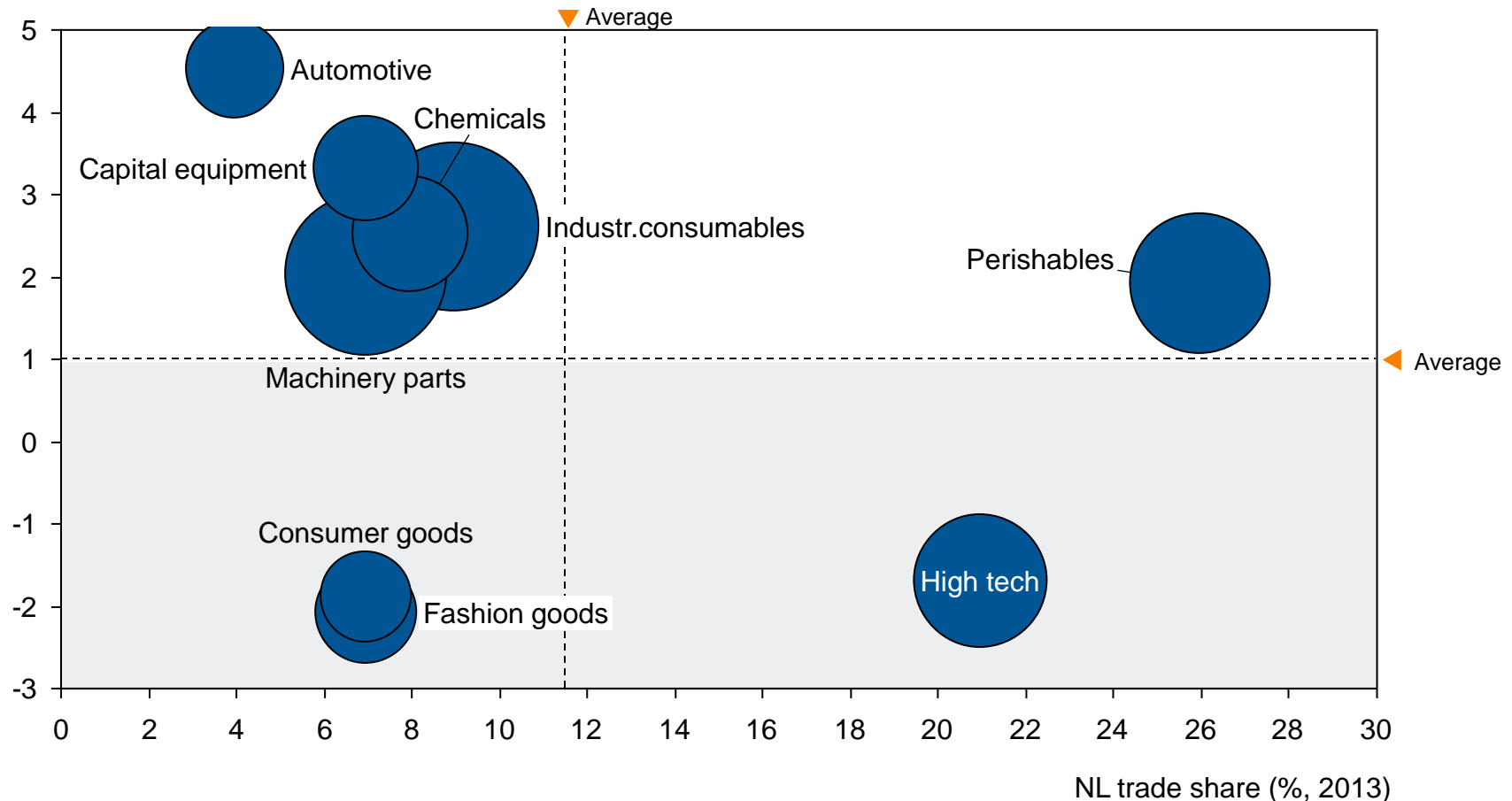
Appendix

# Market share opportunities and risks in different sectors

Our strong market position in perishables and high-tech may need to be defended, whilst volume growth may be achieved in the “low market share, high industry growth” segment

## Western Europe air trade growth by commodity vs. Netherlands trade share

Europe trade growth (% , CAGR 2000-13)



Note: Size of the bubbles indicates air trade volume to/from Western Europe

Source: Seabury Global Trade Database, World Yearly dataset

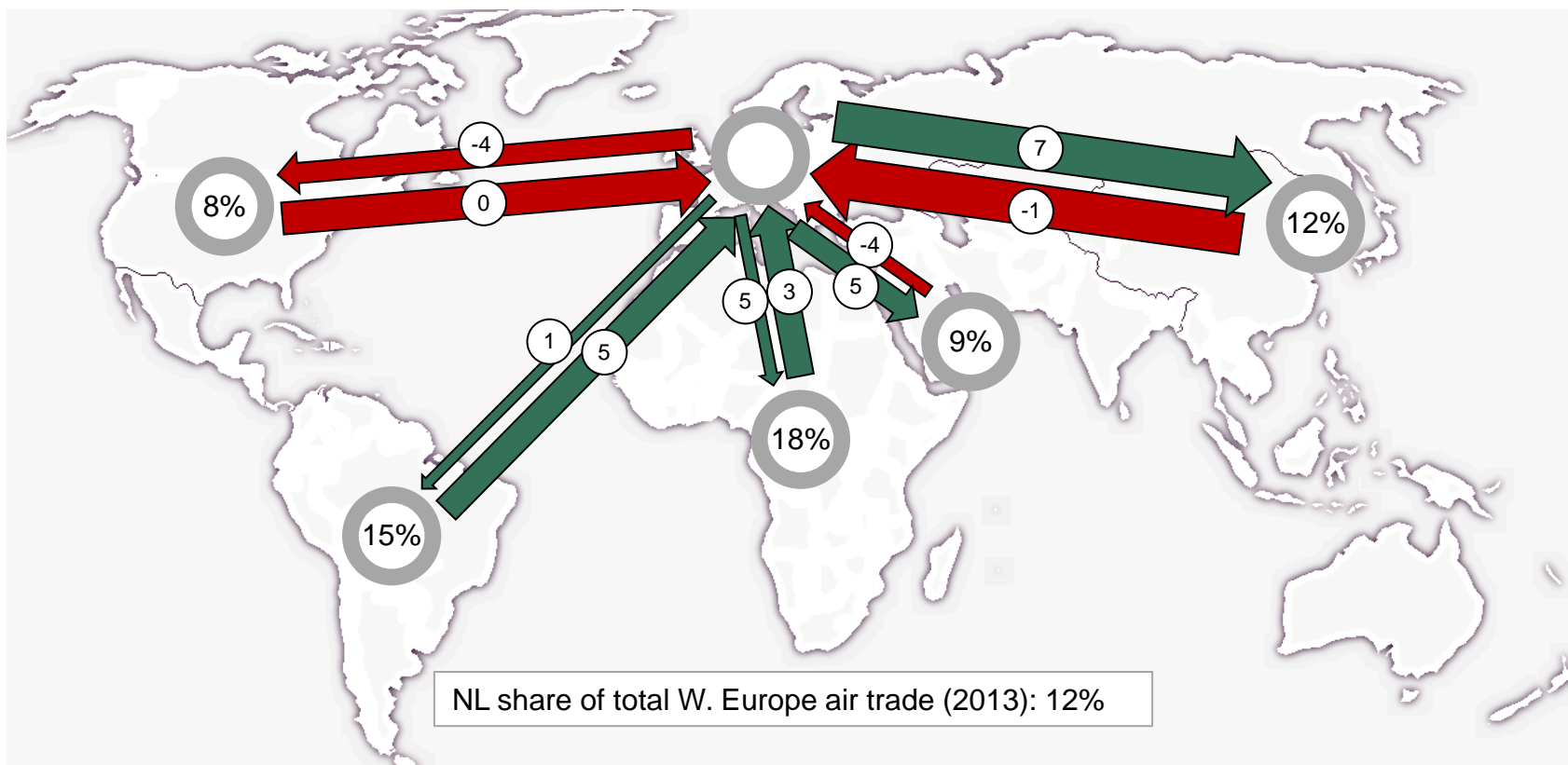
# Netherlands exports have outperformed imports

The Netherlands has a high market share to/from Latin America and Africa, and experienced export growth to all regions, except for the Atlantic; imports from Asia have weakened

## Air trade growth to/from the Netherlands, 2005-2013

(x%) NL % share of total Western Europe Trade by Air (2013)

(y) % trade lane growth (2005-2013 CAGR)



Note: Growth in Compound Annual Growth Rate (CAGR) in terms of weight; thickness of the arrows indicates 2013 air trade volumes to/from the Netherlands in tons  
Source: Seabury Global Trade Database, World yearly dataset



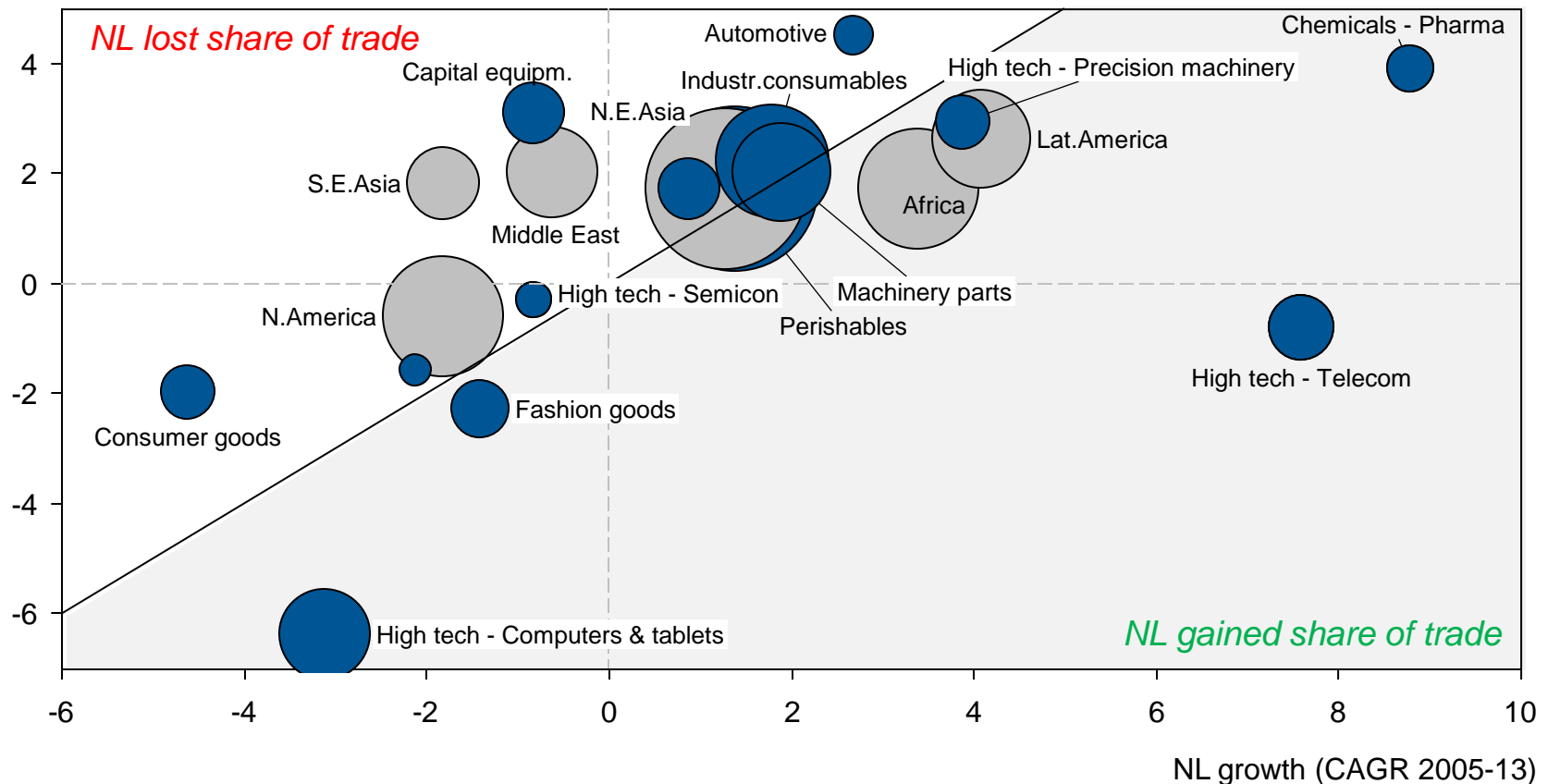
# Winners and losers...

In past years, the Netherlands gained market share in pharma, telecom and computers & tablets, but are outperformed on capital equipment, automotive and consumer goods

## Position of the Netherlands vs Western Europe by commodity and region

% Western Europe growth (CAGR 2005-13)

Regions Commodities



Note: remaining regions and commodities, or 'other' categories, not visualized in this chart; Size of the bubbles indicates air trade volumes to/from the Netherlands in 2013

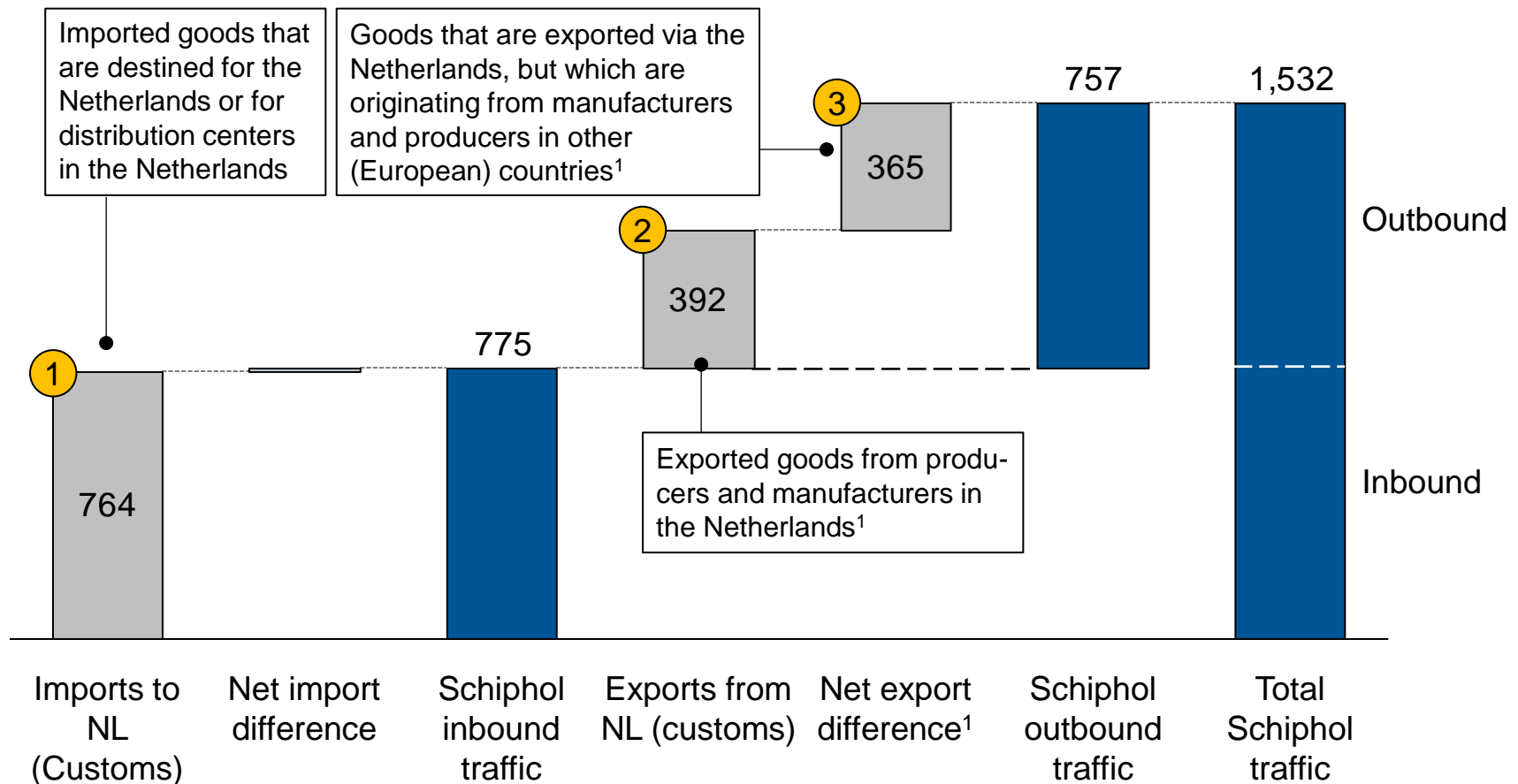
Source: Seabury Global Trade Database

# Three trade concepts relevant for Schiphol

There are three relevant but distinctly different trade concepts that each require a different strategy from the Netherlands, for either defending or growing its market position

## Netherlands trade data and traffic statistics

Thousand tonnes (2013)



1) Net difference between air freight (traffic) from Schiphol airport and reported exports from the Netherlands; Exports from other countries via Schiphol may in reality be higher, if larger volumes of Netherlands exports are exported via other country airports; Source: Seabury Global Trade database, world yearly dataset; Seabury Express database; Schiphol annual traffic statistics

# Different trade concepts require different strategies

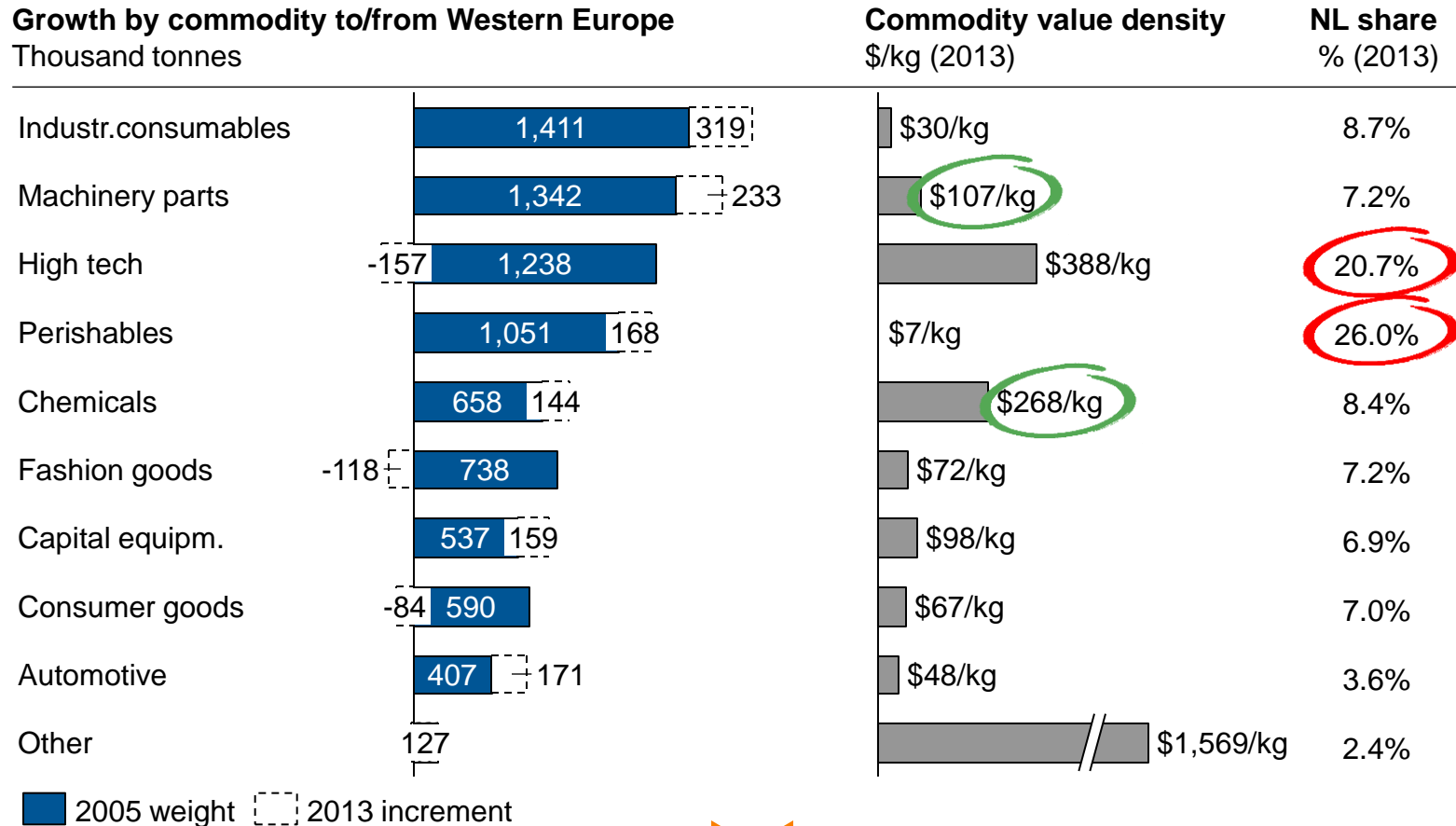
Imports into the Netherlands, exports originating from the Netherlands and exports originating from other (European) countries, each ask for a different strategy

Trade flow	Flow size <sup>1</sup> Tonnes (2013)	Description	Strategy	Relevance for:	
				Air cargo NL	BV NL
1 Imports into NL	694,000 tons/year	<ul style="list-style-type: none"><li>Products that are imported by air into the Netherlands and have a final destination in the Netherlands or in distribution centers that are located in the Netherlands</li></ul>	<ul style="list-style-type: none"><li>Develop an industry sector specific approach to attract distribution activities with value add potential; learn from success in high-tech and perishables</li></ul>		
2 Exports from NL	356,000 tons/year	<ul style="list-style-type: none"><li>Products that are exported by air from the Netherlands and that originate from producers and manufacturers in the Netherlands</li></ul>	<ul style="list-style-type: none"><li>Provide required connectivity, quality infrastructure, ease of customs processes, etc. etc. to realistically satisfy needs of Dutch exporters; important to understand real requirements and relative position of Schiphol</li></ul>		
3 Exports from other countries <sup>2</sup>	~365,000 tons/year	<ul style="list-style-type: none"><li>Goods that are exported via the Netherlands, but which originate from producers and manufacturers in other (European) countries</li><li>Critical trade concept as it is required to balance limited exports with the “excess” of imports</li></ul>	<ul style="list-style-type: none"><li>Promote consolidation at Schiphol and facilitate trucking of goods from European countries to the Netherlands (work with forwarders and airlines)</li><li>Difficult to develop concept as the Netherlands has least influence on this; engage forwarders, airlines and trucking firms</li></ul>		

1) Indicated air trade figures exclude low-value shipments and other customs exceptions; Net resultant of other country exports that fly via Schiphol, minus Netherlands exports that fly via other airports; 2) Net difference between air freight (traffic) from Schiphol airport and reported exports from the Netherlands; Exports from other countries via Schiphol may in reality be higher, if larger volumes of Netherlands exports are exported via other country airports; Source: Seabury Global Trade Database; Seabury Interviews and data analysis

# Value density gives an indication of attractiveness of goods

Chemicals and machinery parts show high value density and a relative low market share for the Netherlands; market share perishables and high-tech need to be defended



**The value density of an industry indicates attractiveness and value add opportunities, but not per se as perishables add significant value to the economy**

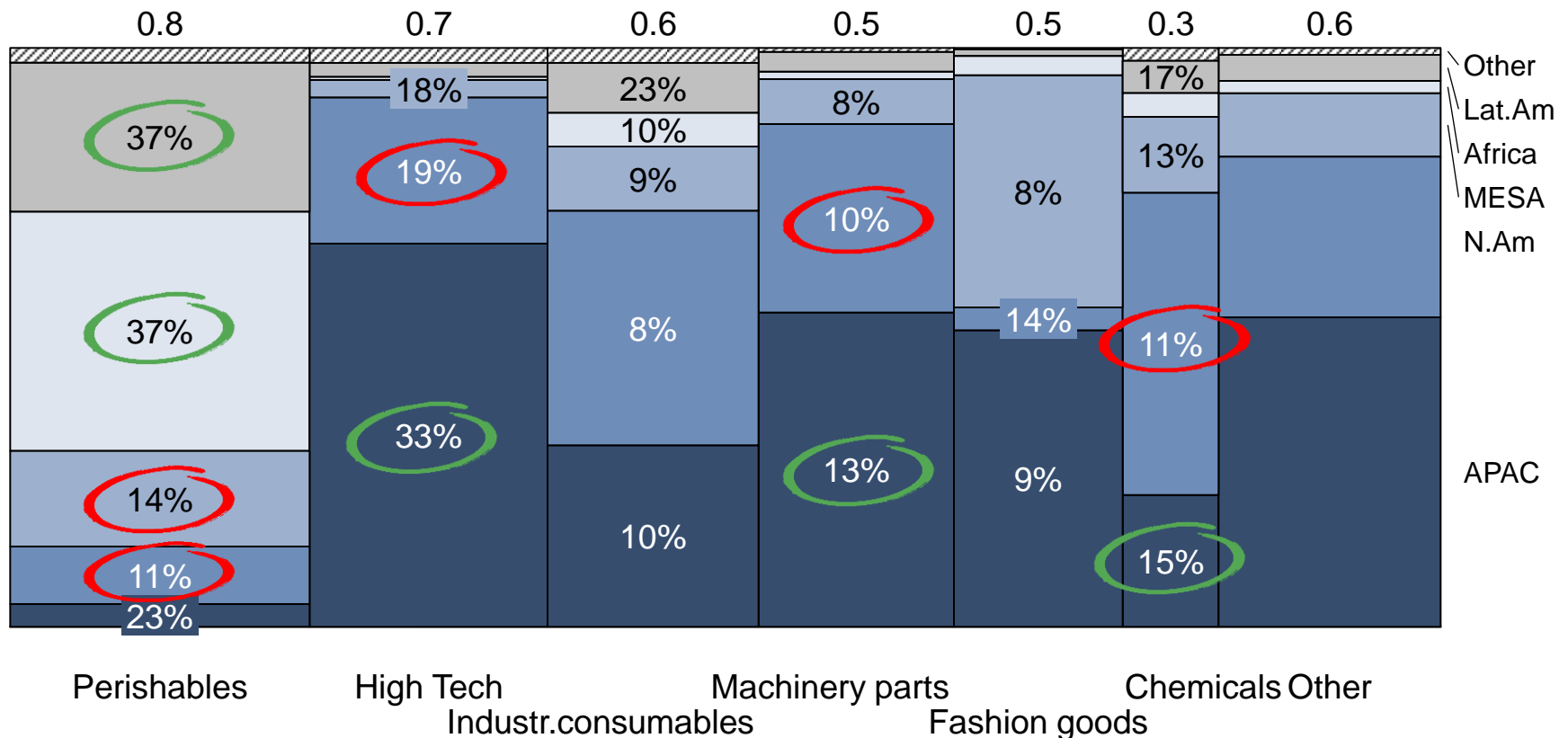
Source: Seabury Global Trade Database, World Yearly dataset

# European imports and market share of the Netherlands

Market shares from North America are below market shares of similar sectors from other regions; an understanding of the rationale may be helpful for attracting new import volumes

## Air cargo import commodities from Western Europe

Million tonnes, 2013



(x) % NL market share Western Europe air imports, 2013

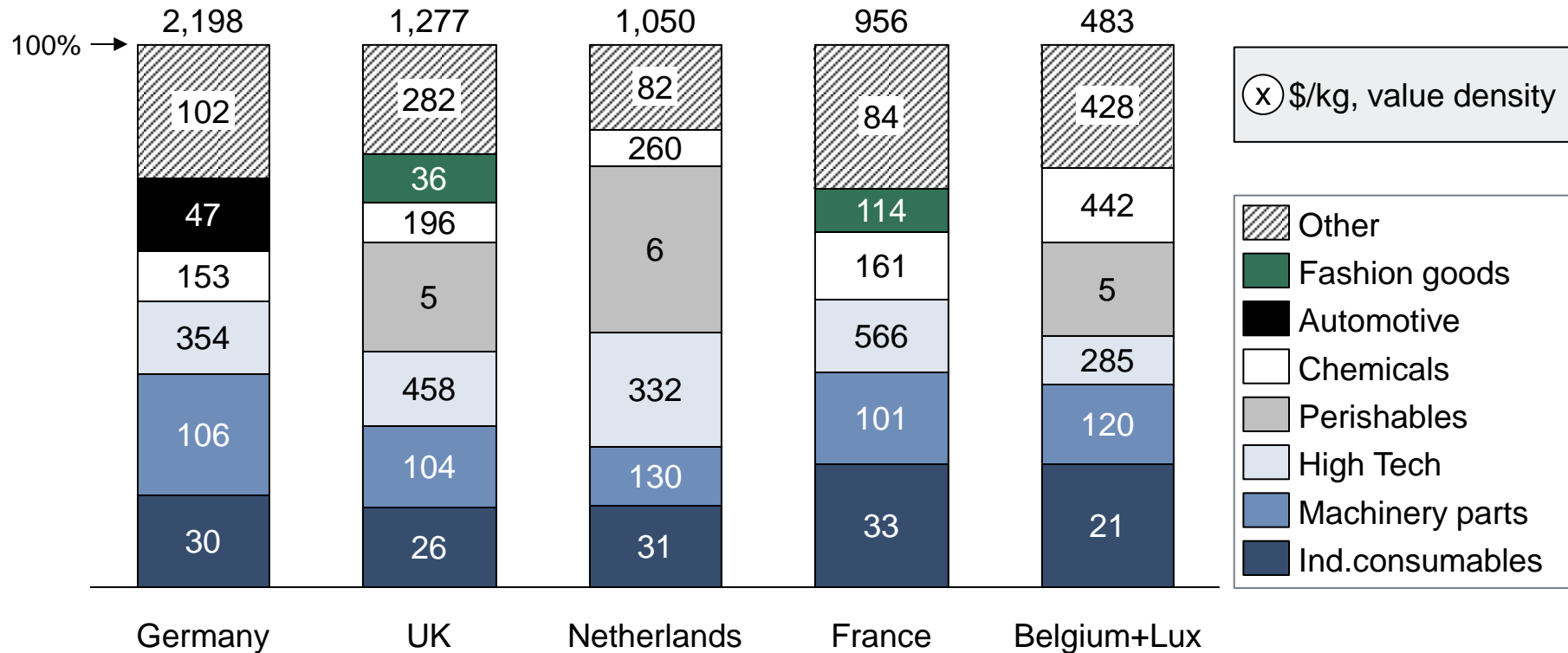
Note: Size of chart indicates Western Europe total air trade exports (2013); percentages in labels indicate Netherlands' share of Western Europe exports per commodity-trade lane; weighted average Netherlands market over Western European exports in terms of air trade weight 17.6% (2013); Source: Seabury Global Trade Database

# Countries seem to “specialize” in industry sectors

Germany is the place to go for automotive and parts; the UK for fashion and perishables; France for fashion, parts and industrial consumables; Belgium for perishables and parts...

## Breakdown of country trade by commodity type

Thousand tons (2013)



Each country has a very distinct import and export profile

Note: Numbers in chart represent value density (\$/kg) of that commodity per country; commodity types less relevant for listed countries have been grouped under 'other' category; Germany trade contains 12% share of 'Capital equipment' commodity type which has been grouped in 'other' category for visual purposes; high value density for 'other' category UK and BE+LUX driven by 'Valuables & secure handling' commodity flow; Source: Seabury Global Trade Database, Europe Yearly dataset

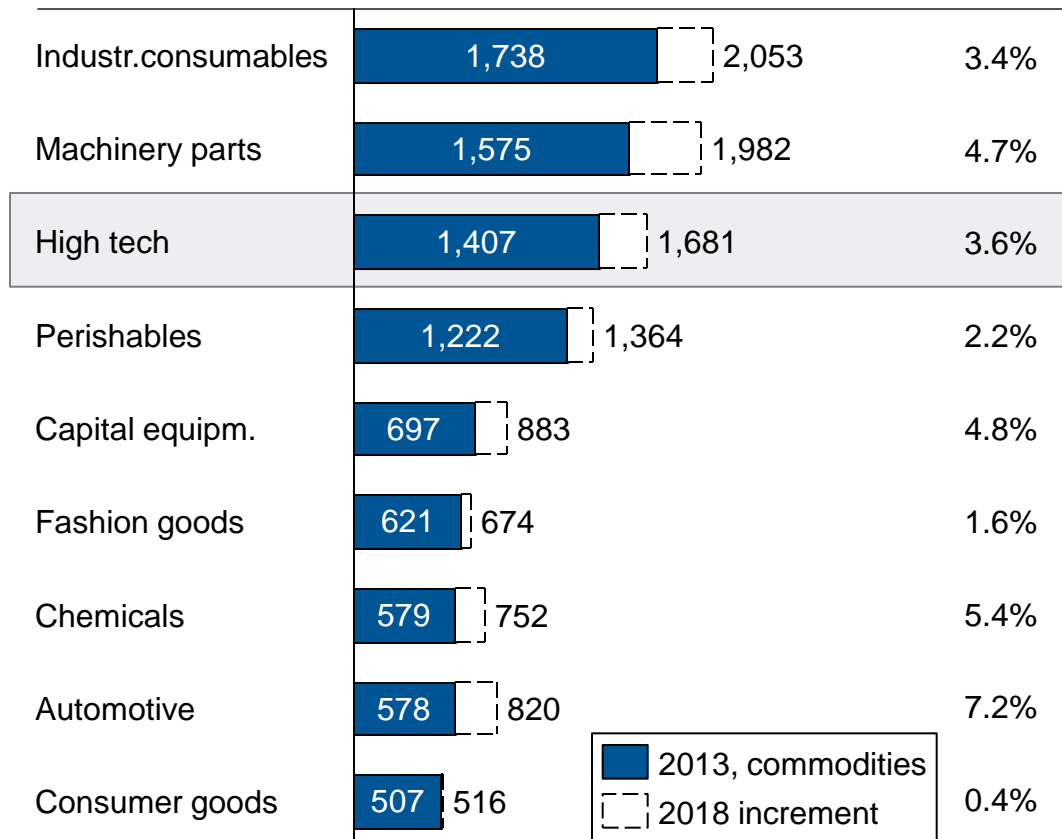
# Growth forecast per industry sector

Automotive, chemicals, machinery parts and capital equipment expected to show strongest growth; fashion and perishables expected to show lower growth

## Forecasted trade growth to/from W. Europe

Thousand tonnes

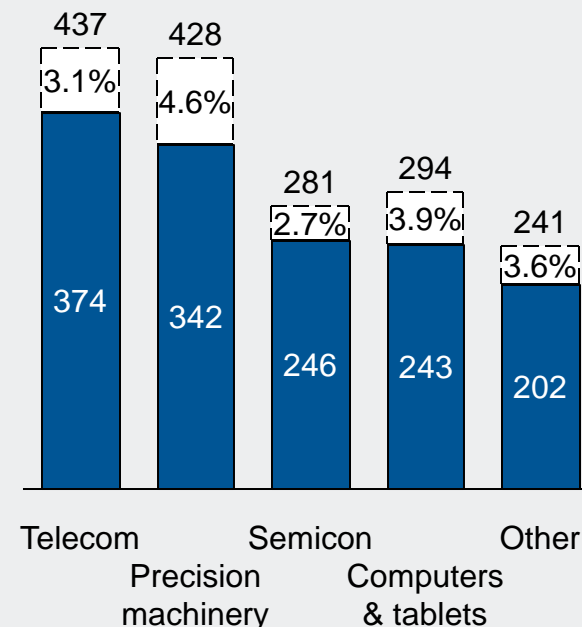
CAGR (2013-2018)



## High tech commodity types

□ 2018 increment (% CAGR)

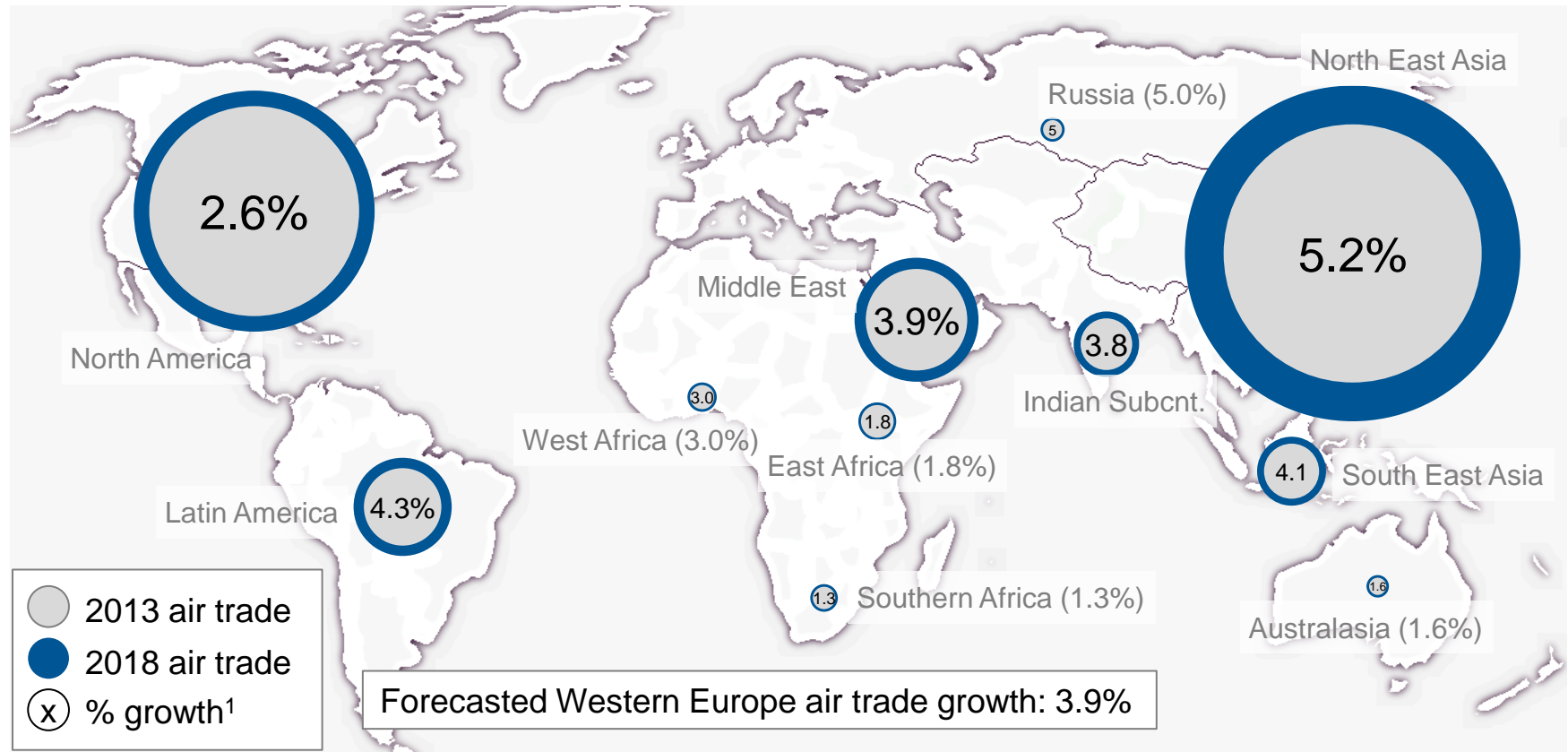
■ 2013



# Asia will continue to be the driver of growth

Europe's largest trading partner, Asia Pacific, will continue to show the highest growth rates; most other regions are expected to grow in the 3-4% range, with the US slightly below that

## Western Europe air trade forecast per region, to/from (2013-2018)



Note: Size of the bubbles indicate size of current and future trade between region and Western Europe; 1) Growth expressed in CAGR

Source: Seabury Global Air Trade Forecast, May 2014



# Conclusions

- Air cargo is a **critical enabler for the economy** and many industry sectors in Europe, as more than 50% of its non-bulk imports and exports come and go by air
- **The Netherlands is “punching above its weight”** in terms of trade by air and has a very strong market position in exports, but even more so in imports
- A collaborative **sector-driven approach** with relevant stakeholders in the Netherlands, will help to grow imports and exports:
  - Market share of the Netherlands in **Perishables** (especially from Latin America and Africa) and **High Tech** (in particular from Asia) has to be defended
  - Growth opportunities exist in a collaborative approach to attracting high value density sectors, such as **Chemicals** (Pharma in particular) and **Machinery Parts**
  - Interviewees indicate **Fashion** as an attractive sector due to size; focus should be on higher end as value density and growth of entire sector are not very positive
- The **“footloose” cargo volumes** that the Netherlands attracts from other countries is critical and asks for a different non-sector driven approach
- From a trade perspective, the Netherlands has lost market share in exports and imports to **North America** and **South East Asia** that may need to be regained
  - Market shares to **Latin America, Africa and North East Asia are high** and best approach may be to defend the position of the Netherlands

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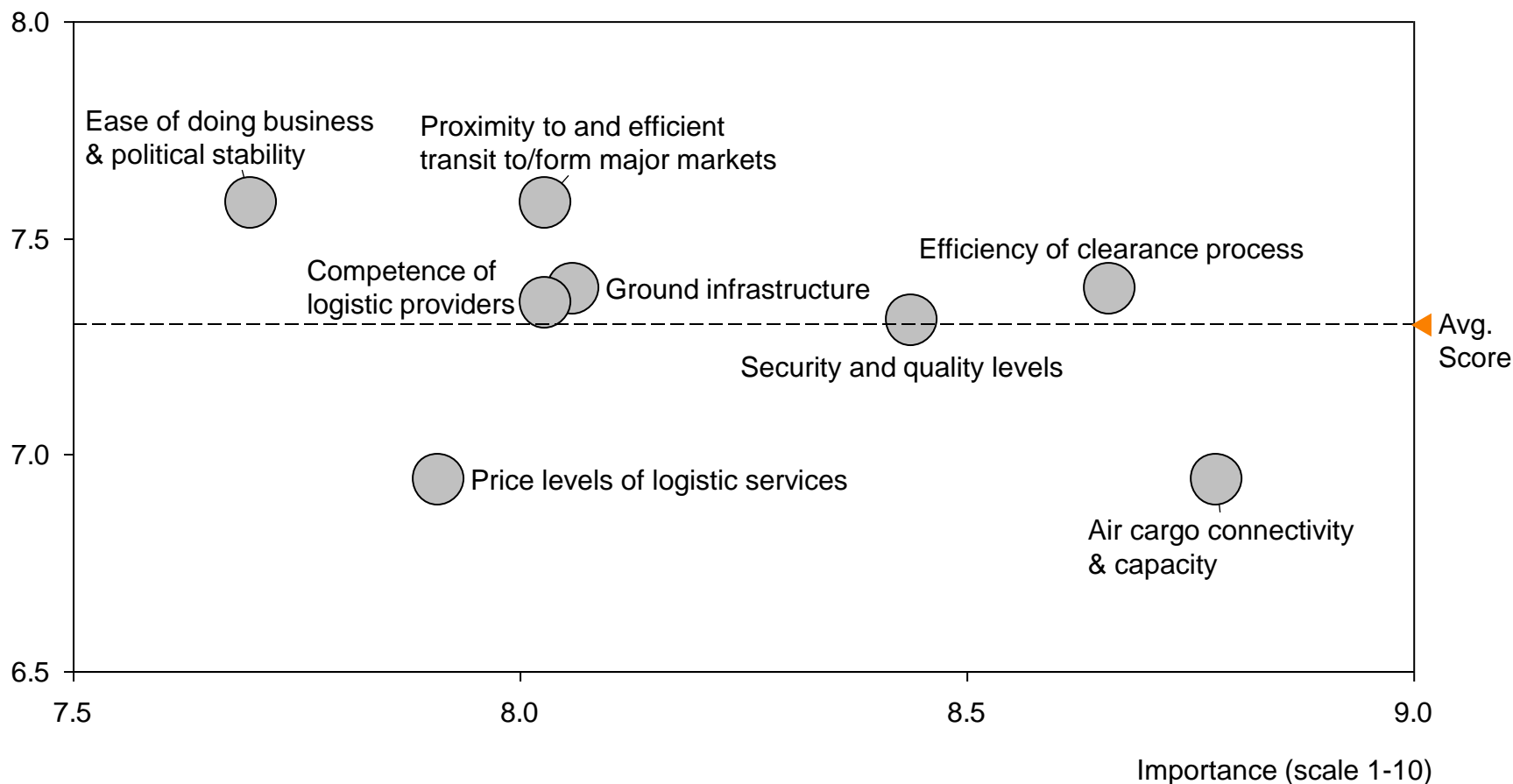
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# What shippers say about the air cargo market?

Performance on seven of the eight identified requirements is high with scores in the 7.0 to 7.5 range; connectivity and efficiency of clearance process are deemed most important

## How important are the following elements to your business, and how would you rate Schiphol's performance on these topics?

Score of Schiphol (scale 1-10)



Note: Total of 36 respondents to the Seabury shipper survey; Questions and answers listed in overview are paraphrased from exact questions in survey for visual purposes; results not weighted according to volume via Schiphol per participating shipper; Source: Seabury shipper survey "Netherlands Air Cargo study - Shippers survey" (in cooperation with EVO)

# Barriers for attracting other airport freight to Schiphol

Shippers were asked about key barriers for attracting volumes shipped via other airports to Schiphol and vice versa; connectivity and preference of the forwarder are key barriers

Barriers for moving air freight volumes to Schiphol from other airports:	Importance: # time barrier was mentioned		Barriers for moving air freight volumes to other airports, away from Schiphol:
1 SPL offers less connectivity than other airports	15	8	1 SPL offers better connectivity
2 My forwarder operates via other airport	10	11	2 My forwarder operates via SPL
3 The cargo handling at other airports is	8	2	3 Cargo handling at SPL is better
4 The fees/costs at SPL are not competitive	7	2	4 Fees/costs at SPL are competitive
5 There are no barriers	6	12	5 There are no barriers
6 Safety and efficiency at other airports are better	4	6	6 Safety and efficiency at SPL are better
7 My business requires proximity of other airport	3	7	7 My business requires proximity of SPL
8 Costs for re-locating are too high	2	3	8 Costs for re-locating are too high
9 Other airports have better ground connection	1	3	9 SPL has a better ground connection

## Other barriers mentioned:

- Insufficient (direct) maindeck capacity to Japan

## Other barriers mentioned:

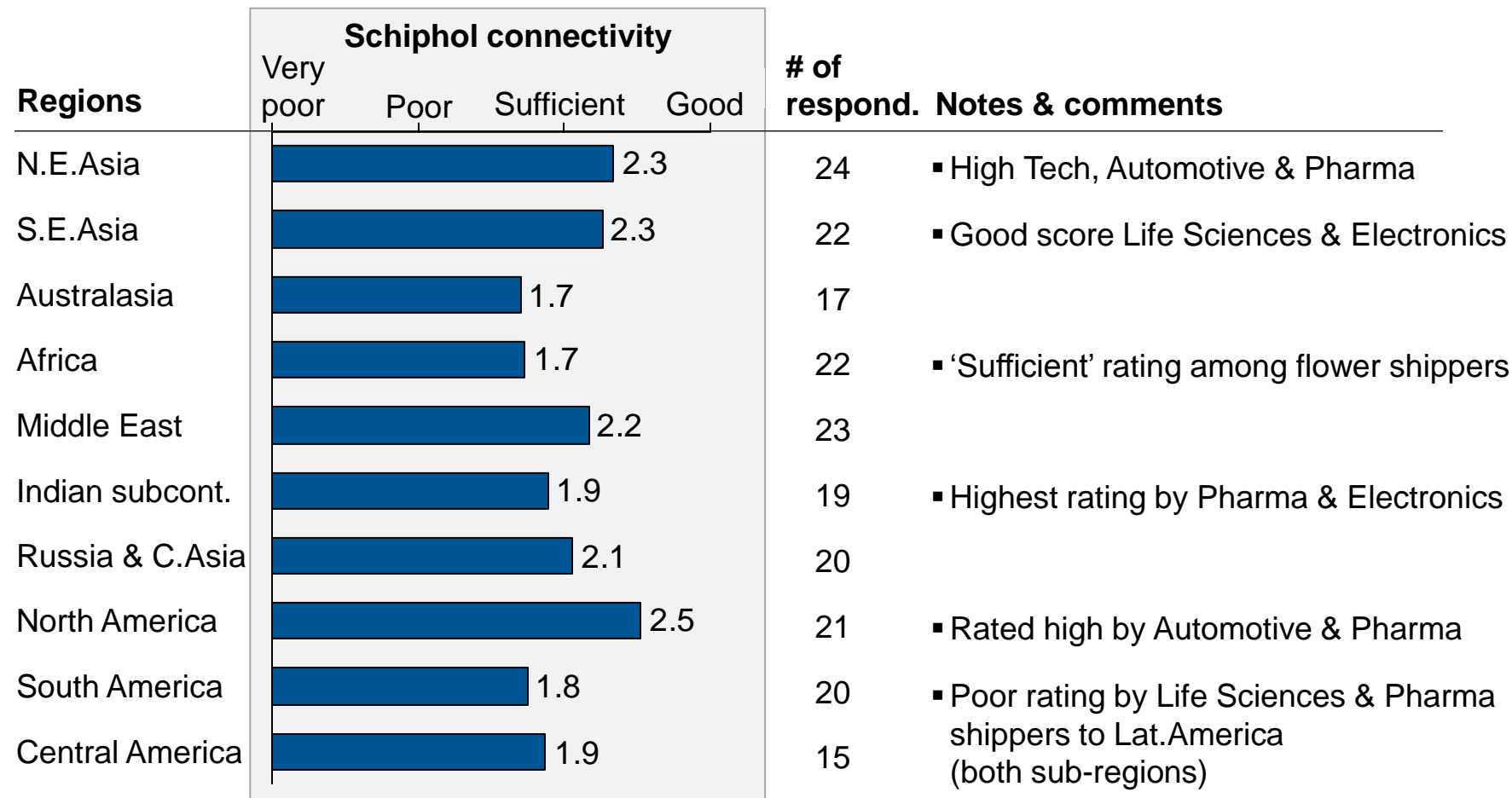
- No. of airlines operating to/from Schiphol
- Good customs arrangements at SPL
- Location of (our) warehouses
- High flight frequencies from SPL

Note: Total of 36 respondents to the Seabury shipper survey; Questions and answers listed in overview are paraphrased from exact questions in survey for visual purposes; results not weighted according to volume via Schiphol per participating shipper; Source: Seabury shipper survey "Netherlands Air Cargo study - Shippers survey" (in cooperation with EVO)

# Shipper rating of connectivity to and from Schiphol

Schiphol is rated relatively well in terms of connectivity, especially to core trading regions; lowest scores are given to Africa, Australasia and Latin America

**How would you rate the cargo connectivity offered to/from Schiphol to the various regions?**



**Suggestions for connectivity improvement:** Ethiopia, South America, Japan, West Coast USA

Note: Total of 36 respondents to the Seabury shipper survey; Rating scale adjusted for visual purposes, 'Excellent' rating category omitted from scale; results not weighted according to volume via Schiphol per participating shipper; Source: Seabury shipper survey "Netherlands Air Cargo study - Shippers survey"

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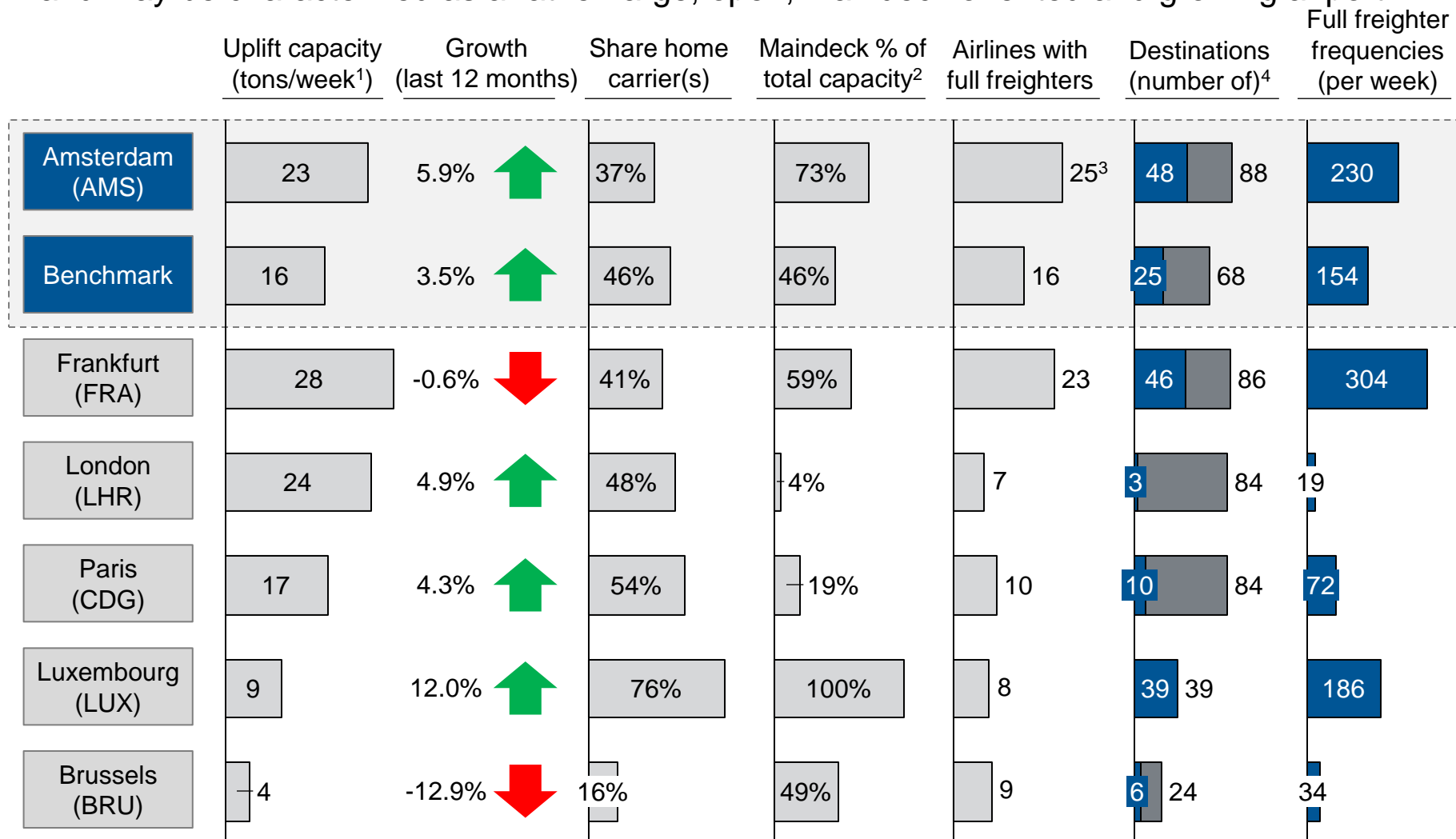
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# Schiphol connectivity compared to competitor airports

Schiphol performs well on selected key indicators vis-à-vis benchmark airports in Europe, and may be characterized as a rather large, open, maindeck oriented and growing airport



Note: Benchmark calculated as weighted average of selected airports; International scheduled capacity only, integrators are excluded from analysis; 1) Average of dataset spanning last 12 months ending Oct 2014; 2) Combi aircraft considered 'Maindeck' capacity; 3) Considers Air France/KLM/ Martinair single carrier; 4) Destination with minimum frequency of 2/week for Maindeck, or 5/week for Belly service; destinations served sufficiently by both Maindeck and Belly are counted under 'Maindeck'; the number of destinations includes intra-Europe positioning flights; Source: Seabury Capacity Database

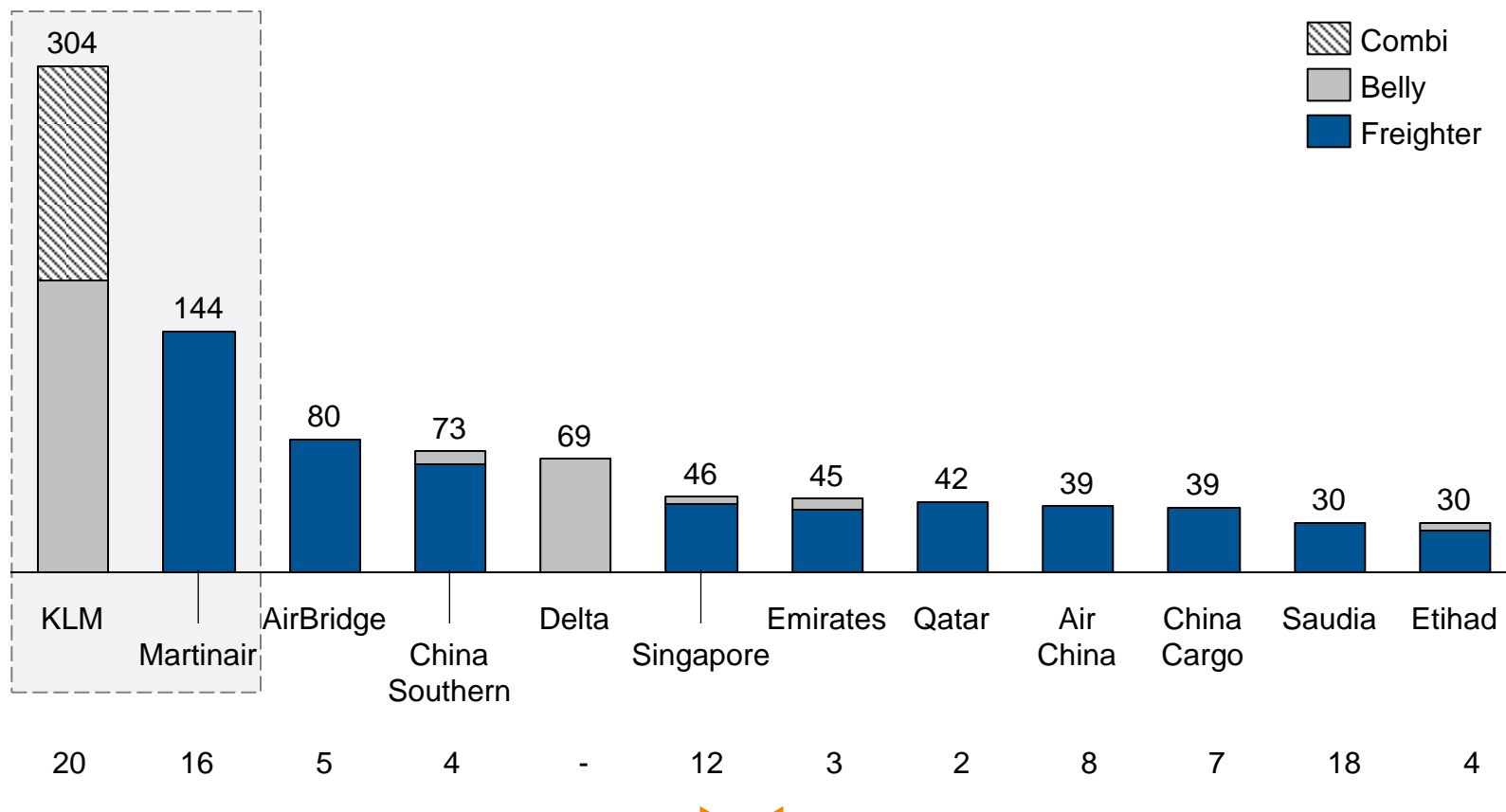
Maindeck  
 Belly

# Maindeck capacity dominates from Schiphol

The cargo capacity that is provided to/from Schiphol is largely maindeck and is driven by KLM/Martinair and a selected number of Chinese and Middle Eastern Airlines

## Available outbound cargo capacity from AMS<sup>1</sup>, last 12 months<sup>2</sup>

Thousand tonnes



## KLM and Martinair provide substantial share of available maindeck capacity

1) International widebody capacity, excludes integrators and charters; 2) 12 months ending July 2014; 3) Combi aircraft considered as maindeck capacity; Note: totals may not match shown values due to rounding differences; Source: Seabury Capacity Database; Ascend database

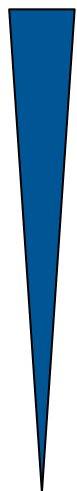


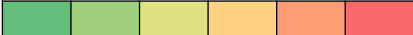
# It is difficult to fly (old generation) freighters profitable

Freighters are however difficult to operate profitably by traditional airlines as breakeven load factors are high; this is true for old and to a lesser extent new generation freighters

## Estimated breakeven load factor, by aircraft type and O&D

LF (%)

Sector	Average yield	BH time	747-8F	777F	747-400F	MD-11F	747-400P2F	
DXB-AMS	\$ 1.50	7.1	79%	83%	89%	91%	96%	
ORD-LHR	\$ 1.40	8.5	101%	105%	112%	112%	117%	
LHR-DEL	\$ 1.50	9.0	100%	104%	111%	111%	116%	
FRA-JNB	\$ 2.70	11.5	71%	74%	80%	82%	87%	
HKG-FRA	\$ 2.60	12.1	77%	82%	88%	90%	95%	
FRA-VCP	\$ 2.70	13.0	80%	84%	91%	93%	98%	
PVG-LAX	\$ 2.50	13.8	92%	96%	103%	104%	109%	
PVG-ANC-LAX	\$ 2.50	15.5	103%	106%	114%	114%	119%	

Breakeven Load Factor: Low  High/Above 100%



## It is understandable that airlines are evaluating their freighter deployment

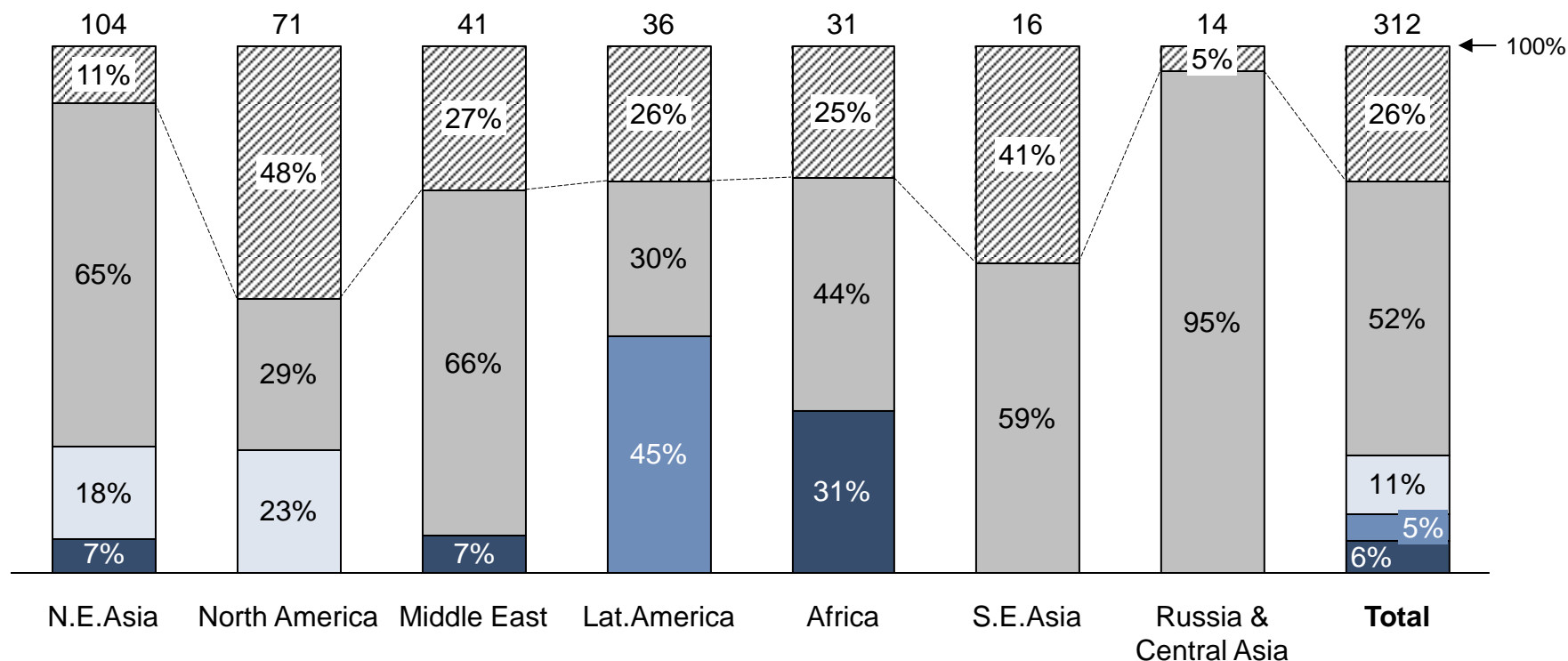
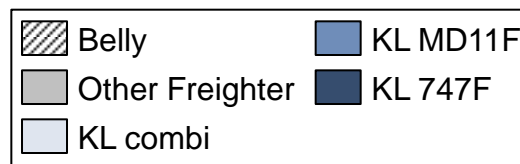
Notes: all aircraft assessed based on equal daily utilization of 11.5BH; theoretical profitability – some aircraft may not be designed to fly specified sectors; yields are average of import/export (a month in 2013), estimated according to market conditions; BH time as average of both directions based on ESAD estimations (“Equivalent Still Air Distance”); overheads assumed to be 5% of revenue; handling at \$0.15 per kg; DOC according to standard Seabury Assumed; Source: Seabury analysis

# Announced retirements may impact Latin American and US

The announcement of KLM to retire MD11F (in 2015-'16) and 747-combis (in 2016-'20) is not surprising and may impact maindeck capacity to Latin America and North America

## Capacity types offered to Schiphol (inbound) per region

Thousand tons uplift, last 3 months<sup>1</sup>



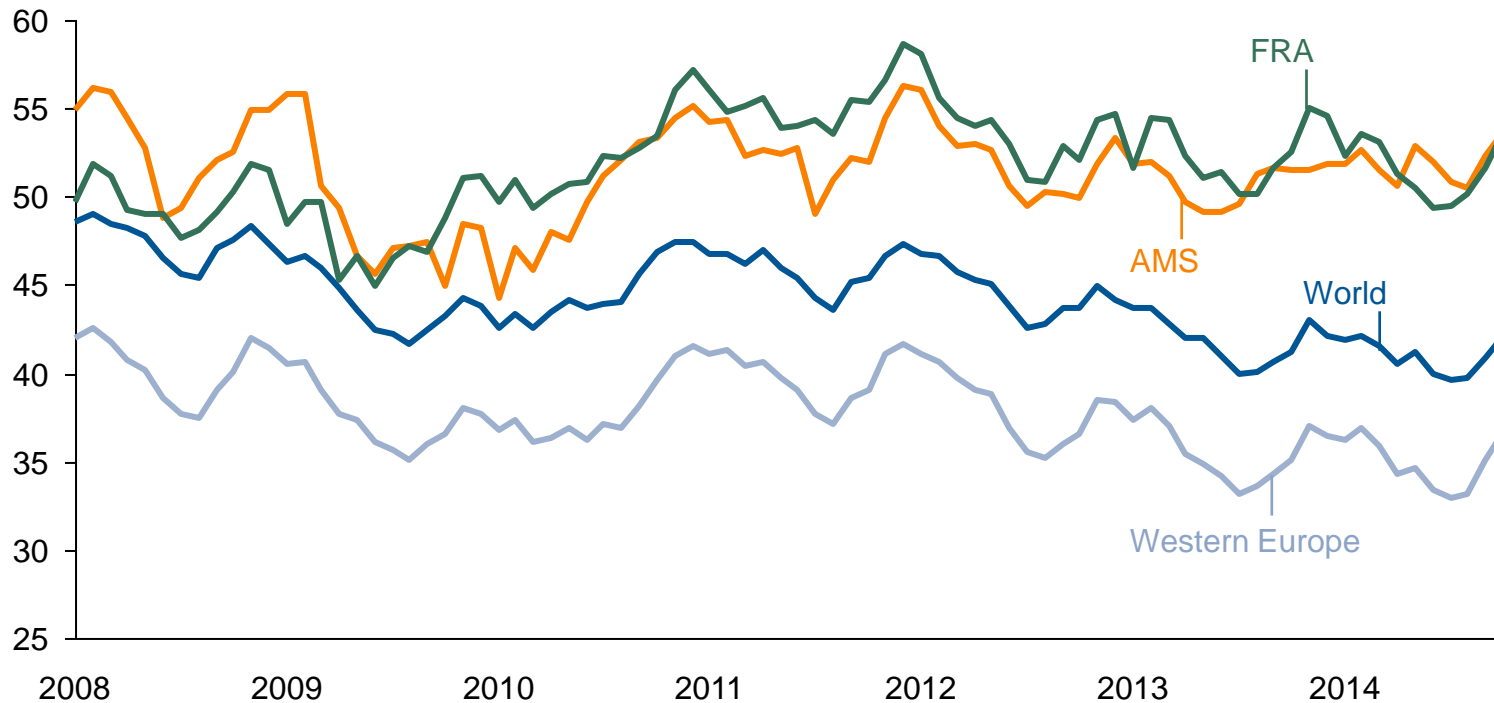
1) Data spans last 3 months ending October 2014, widebody scheduled capacity only (integrators excluded); Note: Capacity per regions divided based on assumptions regarding key cargo region per route; airports typical for technical stops are not considered for determining key region for each route; Intra-Europe (positioning) flights with individual flight number excluded from analysis; difference in total inbound and outbound capacity over analysis period may exist due to intra-Europe flights, and schedule imbalances over the analysis period; Source: Seabury Capacity Legs database, Seabury analysis

# Global freighter share of total capacity decreasing

Amsterdam and Frankfurt have until now been able to withstand the global trend that the freighter share of total capacity is decreasing vis-à-vis belly capacity

## Freighter share per (origin) region

% freighter share of total capacity



Note: Capacity in Available Ton Kilometers (ATKs); scheduled full freighter capacity only (excluding integrators and charters)

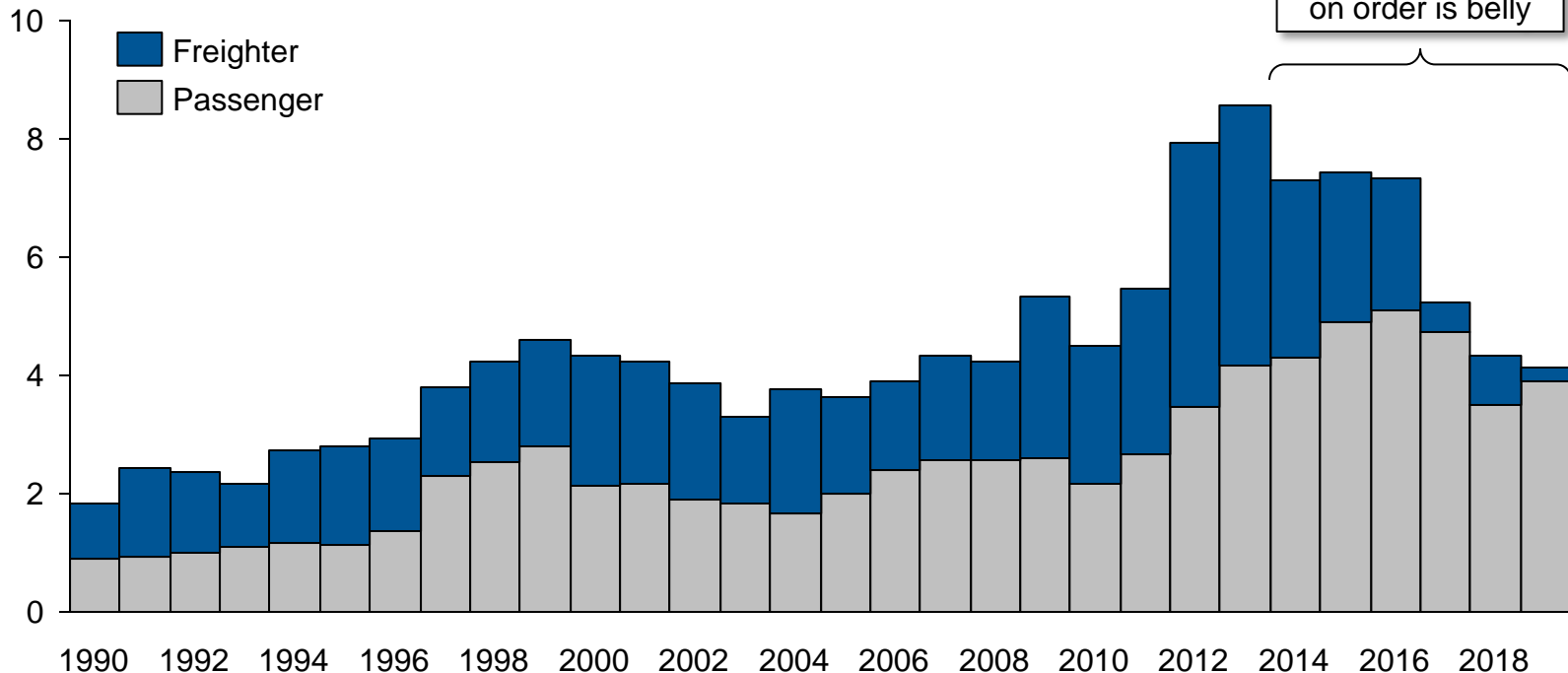
Source: Seabury Capacity Database (legs)

# Passenger aircraft orders drive future capacity growth

The trend of a globally declining freighter share will not end as freighter deliveries peaked in 2013 and as 74% of new expected cargo capacity will be on passenger aircraft

## Factory built freighter & belly<sup>1</sup> capacity on firm order

Thousand tonnes



**Without new freighter orders, capacity will be driven by widebody passenger aircraft orders**

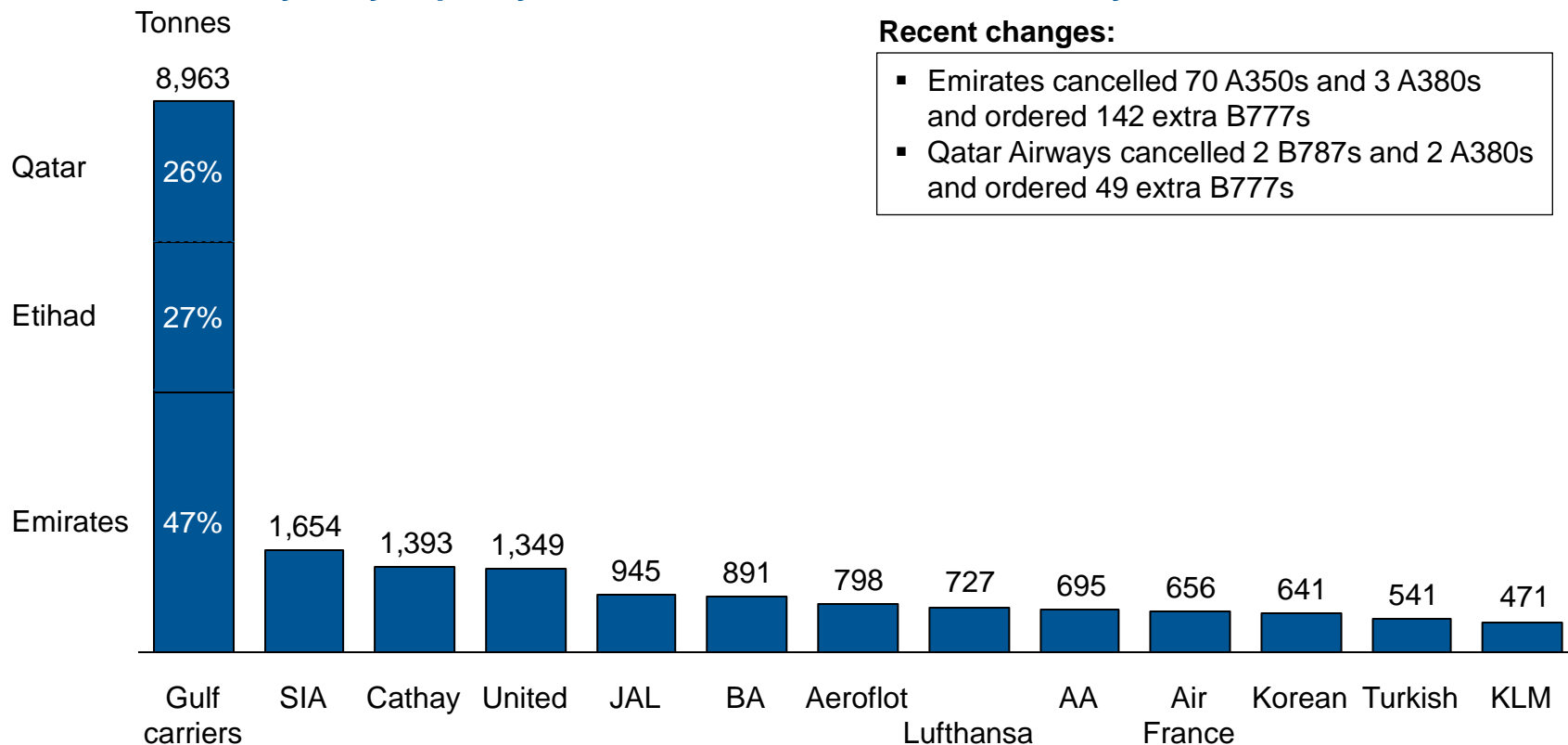
1) Widebody passenger aircraft (incl. mixed passenger/freight combinations); only firm OEM orders considered; years represent build years

Source: Ascend Fleet Database (21 July 2014); Seabury analysis

# Middle Eastern airlines dominate passenger aircraft orders

Many airlines have passenger aircraft on order but the extent to which the three large Middle Eastern airlines currently dominate outstanding orders is unprecedented

## Widebody belly capacity on firm order for 2014-2029 delivery



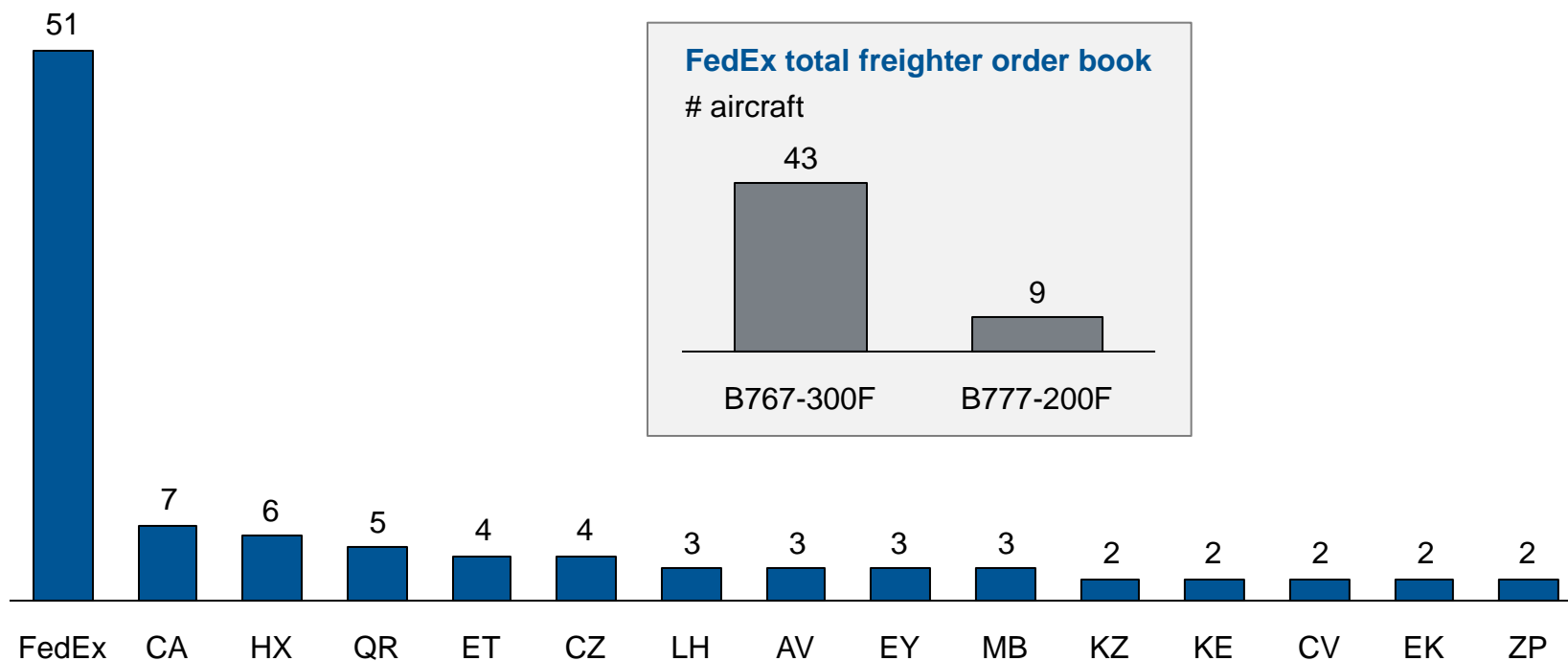
Note: Only firm OEM orders from airlines considered, except those for which the buying carrier has not yet been announced; data excludes optioned aircraft or LOI to order aircraft, e.g., excluding Qatar (59 aircraft), Etihad (51 aircraft) and Emirates (20 aircraft); Source: Ascend Fleet Database (Oct 2014); Seabury analysis

# FedEx placed most freighter orders in the past 5 years

Among carriers with freighter orders, FedEx has by far placed the most orders since 2009 with the 767F making up the bulk of their orders (likely replacement, not additional capacity)

## Freighter orders for delivery 2014-2019 placed since Nov 2009

# aircraft



**FedEx has ordered ~50% of all freighters in the past 5 years**

Source: Ascend, Seabury Capacity Database; Seabury analysis (February 27<sup>th</sup>, 2014)

# Why does cargo require maindeck capacity?

There are different drivers for air cargo to travel on maindeck capacity but only a relatively small portion requires freighter uplift due to physical size of the shipments

## Reasons for cargo to travel on full freighter uplift

Size & nature of product	Consolidation by forwarders	Demand & supply imbalance
<ul style="list-style-type: none"><li>▪ Cargo with certain dimensions and specific dangerous goods cannot travel on lower deck capacity (Belly)</li><li>▪ Interviewees estimate share of this cargo type at Schiphol at 5%-10%</li></ul> <p><b>Examples:</b></p> <ul style="list-style-type: none"><li>▪ Oil &amp; Gas parts</li><li>▪ Horses/Live animals</li><li>▪ Large capital equipment (e.g. ASML machinery)</li></ul>	<ul style="list-style-type: none"><li>▪ Profitability of forwarders largely driven by ability to consolidate individual (smaller) shipments onto larger pallets</li><li>▪ These pallets may require maindeck capacity due to size</li></ul> <p><b>Examples:</b></p> <ul style="list-style-type: none"><li>▪ Consolidation centers of Kuehne Nagel or DHL Global Forwarding in Amsterdam</li><li>▪ No specific commodities</li></ul>	<ul style="list-style-type: none"><li>▪ In markets with high cargo demand, but limited passenger demand, freighter uplift is required to support the air cargo flows</li><li>▪ Shippers may be accustomed to specific types of capacity</li></ul> <p><b>Examples:</b></p> <ul style="list-style-type: none"><li>▪ Flower markets (Colombia/Ecuador, Kenya)</li><li>▪ High tech (China)</li></ul>

Source: Seabury interviews; Seabury analysis; Note: percentages indicative only based on interpretations from conducted interviews

# Conclusions

- **Schiphol performs well on key indicators** vis-à-vis benchmark airports in Europe, and may be characterized as a rather large, open, maindeck oriented, and growing airport
- The cargo capacity that is provided to/from **Schiphol is largely maindeck and driven by KLM/Martinair** and a selected number of Chinese and Middle Eastern Airlines
- Freighters are however **difficult to operate profitable** by airlines as breakeven load factors are high; this is true for old and to a lesser extend new generation freighters
- The announcement of KLM to retire MD11F (in 2015-'16) and 747-combis (in 2016-'20) is not surprising and may **impact maindeck to Latin America, Africa and North America**
- Amsterdam and Frankfurt have until now been able to withstand the global trend that the **freighter share of total capacity is decreasing** vis-à-vis belly capacity
- The trend of a globally **declining freighter share will not end** as freighter deliveries peaked in 2013 and as 74% of new expected cargo capacity will be on passenger aircraft
  - Many airlines have passenger aircraft on order but the extend to which the three large **Middle Eastern airlines currently dominate** outstanding orders is unprecedented
  - Among carriers with freighter orders, **FedEx has by far placed the most orders since 2009** with the 767F making up the bulk of their orders (likely replacement, not additional capacity)
- There are **different drivers for air cargo to travel on maindeck** capacity but only a relatively small portion requires freighter uplift due to physical size of the shipments



Air cargo critically important for the Netherlands

Opportunities and risks in trade lanes and product groups

Highlights from shipper survey

Belly vis-à-vis freighter dynamics and position Schiphol

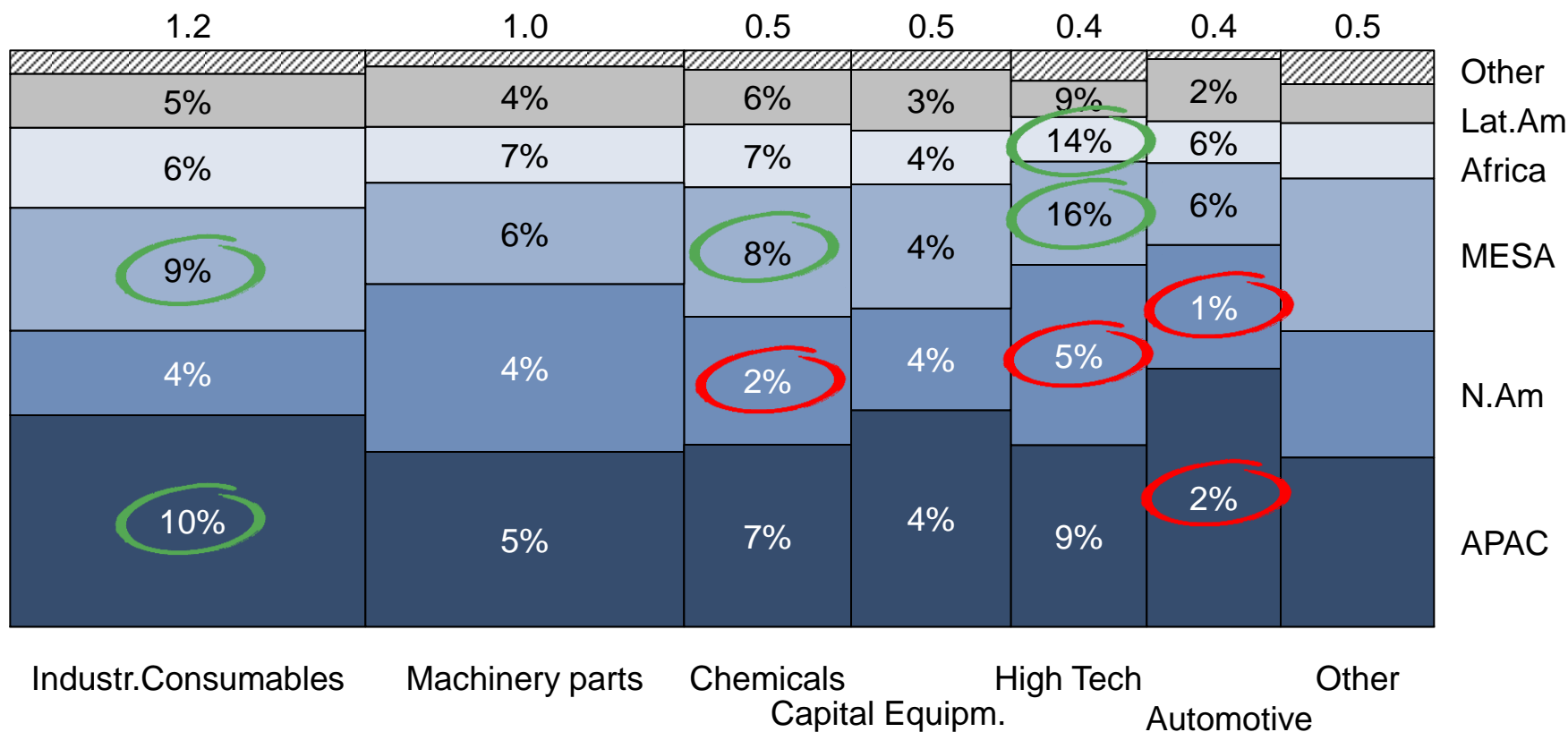
Appendix

# European exports and market share of the Netherlands

Outbound growth may come from “locking in” Dutch exports at Schiphol and from attracting consolidations from other countries; analysis of high and low market shares will be insightful

## Air cargo export commodities from Western Europe

Million tonnes, 2013



(X) % NL market share Western Europe air exports, 2013

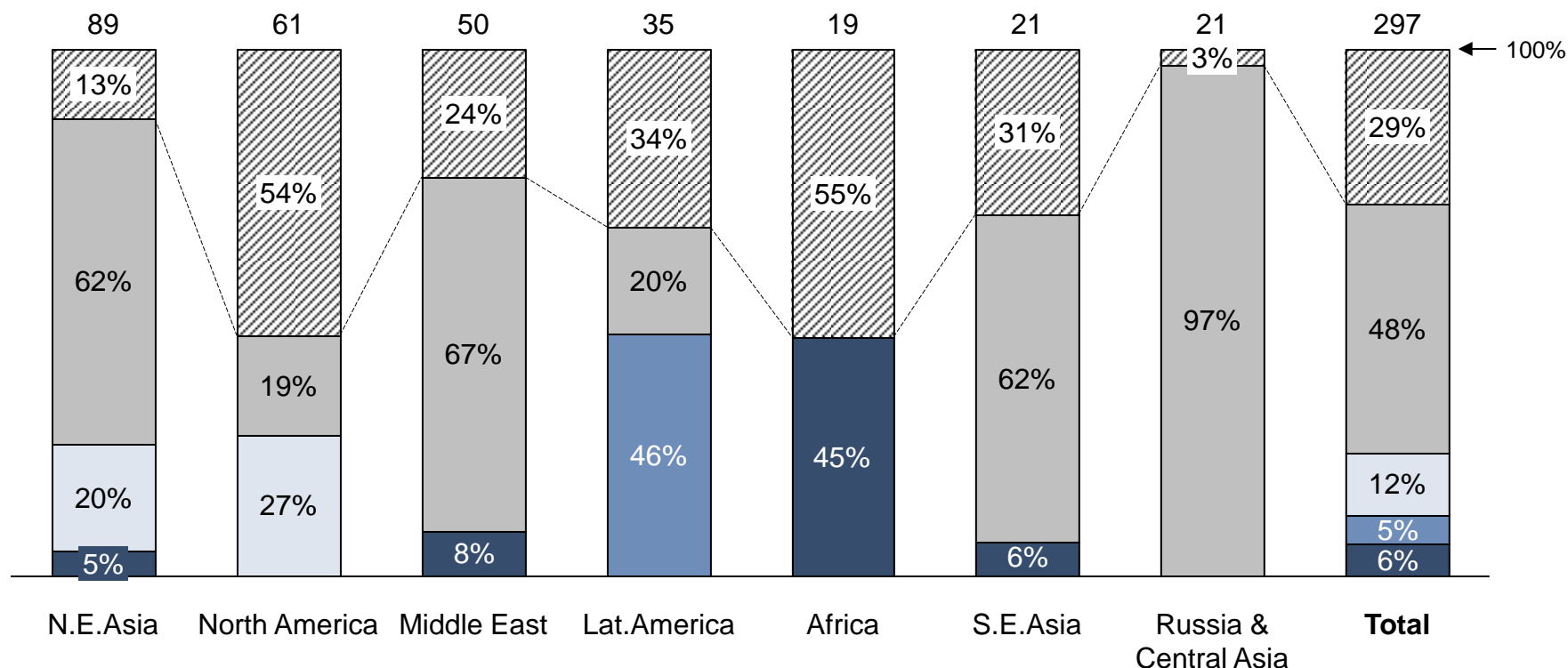
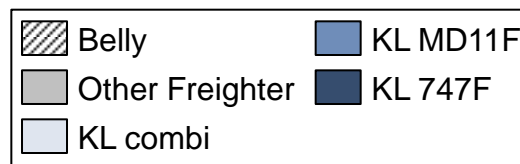
Note: Size of chart indicates Western Europe total air trade exports (2013); percentages in labels indicate Netherlands' share of Western Europe exports per commodity-trade lane; weighted average Netherlands market over Western European exports in terms of air trade weight 7.1% (2013); Source: Seabury Global Trade Database

# Announced retirements may impact Latin American and US

The announcement of KLM to retire MD11F (in 2015-'16) and 747-combi aircraft (in 2016-'20) may impact maindeck capacity to Latin America and North America

## Capacity types offered from Schiphol (outbound) per region

Thousand tons uplift, last 3 months<sup>1</sup>



1) Data spans last 3 months ending October 2014, widebody scheduled capacity only (integrators excluded); Note: Capacity per regions divided on basis of assumptions regarding key cargo destination region per route; airports typical for technical stops are not considered for determining key region for each route; Intra-Europe (positioning) flights with individual flight number are excluded from analysis; difference in total inbound and outbound capacity over analysis period may exist due to intra-Europe flights and schedule imbalances over the analysis period; Source: Seabury Capacity Legs database, Seabury analysis

# Who reports what in terms of exports?

The “true” origin of a product; the location of its customs clearance; from which airport it is flown; and the origin on the master airwaybill, define where a product is registered

Origin of goods:	Origin Netherlands				Origin other country			
Point of customs:	Netherlands		Other country		Netherlands		Other country	
Airport:	Netherlands	Other airport	Netherlands	Other airport	Netherlands	Other airport	Netherlands	Other airport
Master AWB <sup>1</sup> :	AMS		Other		AMS		Other	
-----								
Data coverage: (reported as NL)	Schiphol statistics		Schiphol statistics		Schiphol statistics		Schiphol statistics	
	Cargonaut		Cargonaut (partial)		Cargonaut		Cargonaut (partial)	
	Seabury trade database							
	WorldACD				WorldACD			
Definition:	Netherlands	Airline trucks from NL to other airport <sup>1</sup>	Expected to be limited in size	Forwarder trucks from NL to other airport	Forwarder trucks to NL from other	Expected to be limited in size	Carrier trucks to NL from other <sup>1</sup>	Majority of global air cargo

Source: Industry interviews; assumptions based on general industry practices and Seabury analysis, exceptions may occur; 1) bonded truck

# Who reports what in terms of imports?

The “true” destination of a product; the location of its customs clearance; to which airport it is flown; and the destination on the master airwaybill, define where a product is registered

Destination of goods:	Destination Netherlands				Destination other country			
Point of customs:	Netherlands		Other country		Netherlands		Other country	
Airport:	Netherlands	Other airport	Netherlands	Other airport	Netherlands	Other airport	Netherlands	Other airport
Master AWB <sup>1</sup> :	AMS		Other		AMS		Other	
-----								
Data coverage: (reported as NL)	Schiphol statistics		Schiphol statistics		Schiphol statistics		Schiphol statistics	
	Cargonaut		Cargonaut (partial)		Cargonaut		Cargonaut (partial)	
	Seabury trade database							
	WorldACD				WorldACD			
Definition:	Netherlands	Airline trucks to NL from other airport <sup>1</sup>	Expected to be limited in size	Fwdr trucks to NL from other airport	Fwdr trucks from NL to other airport	Theoretical; expected to be limited	Carrier trucks from NL to other airport <sup>1</sup>	Rest of global air cargo

Source: Industry interviews; assumptions based on general industry practices and Seabury analysis, exceptions may occur; 1) bonded truck