ING International Trade Study
Developments in global trade: from 1995 to 2017

Czech Republic
Executive summary

The Czech Republic is expected to grow on average 1.5% in the coming years. This is relatively low compared to the average of other Central and Eastern European countries and also relatively low compared to the global average of 3.7%. Because of its own economic growth and that of its main trading partners, Czech exports are expected to grow 9.9% annually to US$ 286 bn in 2017, making the Czech Republic the 30th largest exporter worldwide. Similarly, import demand will grow with an average of 9.9% per year to US$ 267 bn in 2017, meaning that the Czech Republic will take the 29th position on the global list of largest importers. By 2017, the Czech Republic will mainly import office telecom & electrical equipment, industrial machinery and ores & metals, which together account for 44% of total imports of the Czech Republic. Similarly, the Czech Republic’s exports will mainly consist of office telecom & electrical equipment, road vehicles & transport equipment and industrial machinery. Together these products will represent 55% of total exports in 2017. By 2017, the Czech Republic will mainly import products from Germany, Poland and Slovakia, which together account for 47% of total imports of the Czech Republic. The Czech Republic’s main export markets will be Germany, Slovakia and Poland. Together these countries will account for 47% of total exports in 2017.

About the International Trade Study by ING

The ING International Trade Study aims to help ING’s (inter)national clients develop their knowledge and capabilities for doing business across borders, and to contribute to the public debate on internationalization. We do this by generating valuable insights on the current and future economic trends and international trade developments worldwide.

This report is part of a series of ING 2012 International Trade Study reports, which includes forecasts for 60 different country and 13 product group reports. These reports document trade developments over the past years and the ING forecasts (2012-2017) for future international trade patterns and business opportunities, by partner country and export product. These forecasts are derived from a model specifically developed by the ING Economics Bureau (see also Methodology), and complemented with the in-depth knowledge of ING economists in our offices around the world.
**International Trade**

<table>
<thead>
<tr>
<th>Economy</th>
<th>2012F</th>
<th>2013F</th>
<th>2014F</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP growth (real)</td>
<td>-0.9%</td>
<td>2.0%</td>
<td>3.3%</td>
</tr>
<tr>
<td>GDP nominal (bn)</td>
<td>$194</td>
<td>$196</td>
<td>$224</td>
</tr>
<tr>
<td>Exchange rate* EUR/CZK</td>
<td>25.0</td>
<td>24.0</td>
<td>23.0</td>
</tr>
<tr>
<td>Inflation</td>
<td>3.5%</td>
<td>2.7%</td>
<td>2.4%</td>
</tr>
<tr>
<td>GDP composition by sector</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>1.6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industry</td>
<td>38.1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Services</td>
<td>60.3%</td>
<td></td>
<td></td>
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</tbody>
</table>

**Population**

<table>
<thead>
<tr>
<th>2011</th>
<th>2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.5</td>
<td>10.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GDP per capita</th>
<th>$18,711</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unemployment rate (avg.)</td>
<td>6.7%</td>
</tr>
<tr>
<td>Employment (mln persons)</td>
<td>4.926</td>
</tr>
</tbody>
</table>

**Other indicators**

<table>
<thead>
<tr>
<th>Competitiveness rank WEF</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>38</td>
<td>39</td>
<td>64</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ease of doing business rank</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>70</td>
<td>64</td>
<td>65</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Credit rating:</th>
</tr>
</thead>
<tbody>
<tr>
<td>S&amp;P</td>
</tr>
<tr>
<td>Moody’s</td>
</tr>
<tr>
<td>Fitch</td>
</tr>
</tbody>
</table>

**Exports by region**

- **North America**: 2%
- **EU**: 83%
- **CIS**: 4%
- **Asia**: 5%
- **Africa**: 1.6%
- **South America**: 1%
- **Oceania**: 0.3%

<table>
<thead>
<tr>
<th>Exports (bn)</th>
<th>$162</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imports (bn)</td>
<td>$151</td>
</tr>
<tr>
<td>Trade balance (bn)</td>
<td>$11.57</td>
</tr>
<tr>
<td>Exports % of GDP</td>
<td>64%</td>
</tr>
</tbody>
</table>

**Trade by products (bn)**

- **Food & live animals**
  - Exports: $5.10
  - Imports: $7.36

- **Beverage & Tobacco**
  - Exports: $1.14
  - Imports: $0.93

- **Crude materials, inedible, except fuels**
  - Exports: $4.71
  - Imports: $4.33

- **Manufactured goods**
  - Exports: $28.12
  - Imports: $28.42

- **Machinery & Transport equipment**
  - Exports: $87.44
  - Imports: $61.30

- **Mineral fuels**
  - Exports: $6.79
  - Imports: $13.91

- **Animal and vegetable oils**
  - Exports: $0.25
  - Imports: $0.44

- **Miscellaneous manufactured articles**
  - Exports: $16.02
  - Imports: $14.72

- **Chemicals**
  - Exports: $9.79
  - Imports: $17.08

*end period*
Economic growth in the coming years will remain sluggish in developed markets. Especially the Eurozone will only experience limited growth as the region continues to struggle with the Eurocrisis. World output growth is strongly driven by emerging markets, in particular China and other developing Asian countries.

The GDP growth of Czech Republic is predicted to be lower than the average of Central and Eastern Europe in 2013, but approximately the same in 2014.
**Trade forecast**

**Czech Republic**

1995 2011 2017

**World ranking**
36 30 30

**CAGR 2012-2017**
9.9%

In the coming years, exports (in current dollar terms) are expected to increase with 9.9% annually. The rank of Czech Republic in the list of largest exporters worldwide will remain the same at 30.

Demand for foreign products (imports) is also expected to increase in the next five years, with 9.9% annually. The rank of Czech Republic in the list of largest importers worldwide will increase to 29.

Worldwide, the top three export and import countries in 2017 will be China, United States and Germany. The countries that show the greatest *increase* in demand for imports of foreign products are Vietnam, Indonesia and Taiwan.
Czech import demand

Czech import origins

The size of the bubble represents the size of imports

Demand for products: origins of imports

Main origins of imports, 2011 and 2017*

By 2017, the Czech Republic will mainly import products from Germany, Poland and Slovakia, which together account for 47% of total imports of the Czech Republic. In volumes, the most important trade flows to the Czech Republic currently include office telecom & electrical equipment from Germany, industrial machinery from Germany, and office telecom & electrical equipment from China. In the coming years, these flows are expected to change with 6%, 7% and 10%.

Top 10 largest import flows by product and country of origin*

By 2017, the Czech Republic will mainly import products from Germany, Poland and Slovakia, which together account for 47% of total imports of the Czech Republic. In volumes, the most important trade flows to the Czech Republic currently include office telecom & electrical equipment from Germany, industrial machinery from Germany, and office telecom & electrical equipment from China. In the coming years, these flows are expected to change with 6%, 7% and 10%.

*within the 60 countries and product flows included in the study
Demand for products: imports by product group

By 2017, the Czech Republic will mainly import office telecom & electrical equipment, industrial machinery and ores & metals, which together account for 44% of total imports of the Czech Republic.

Note: the sum of flows from 60 countries included in the study.
Where do Czech products go to?

Czech export markets

The size of the bubble represents the size of exports.

The Czech Republic’s main export markets will be Germany, Slovakia and Poland. Together these countries will account for 47% of total exports in 2017. In volumes, the most important export flows from the Czech Republic currently consist of office telecom & electrical equipment to Germany, road vehicles & transport equipment to Germany, and industrial machinery to Germany. In the coming years, these flows are expected to change with 4%, 3% and 4% per year,
By 2017, the Czech Republic's exports will mainly consist of office telecom & electrical equipment, road vehicles & transport equipment and industrial machinery. Together these products will represent 55% of total exports in 2017.

Note: the sum of flows to 60 countries included in the study.
Methodology and data considerations

Our forecasts are derived from an econometric model of international trade in goods among 60 countries. Trade among these countries represents 87% of world trade in goods classified by SITC excluding SITC 9.

- Data (1990-2011) for exports from and among 60 countries (forming 3600 country pairs) at the SITC(rev.3) 2-digit product classification were obtained from UNCTAD International Trade Statistics.
- These were combined with several macroeconomic variables, including GDP, GDP growth, and unit labour costs (GDP/capita) (for both the origin and destination country; source: IMF), as well as geographical distance and cultural distance between the two countries in each country pair (source: CEPII; Hofstede).
- Forecasts for macroeconomic variables (GDP, GDP growth and ULC) for the 2012-2017 period were based on our own ING forecasts.
- The trade forecasts were derived from a single equation ADL, explaining 90% of the variance in the dependent variable, specified as follows:

\[
\log\text{Exports}_{ijkt} = \alpha_j + \alpha_d + \beta_1 \log\text{Exports}_{ijkt-1} + \beta_2 (\log\text{Exports}_{ijkt-1})^2 + \beta_3 d \log\text{Exports}_{ijkt-1} \times d + \gamma X_{ijkt} + \epsilon_{ijkt}
\]

where \(\log\text{Exports}_{ijkt}\) represents the logarithmic value of exports of country \(i\) to country \(j\) of product \(k\) at time \(t\), \(\alpha_j\) the set of partner fixed effects, \(\alpha_d\) the set of product group fixed effects, \(\log\text{Exports} \times d\) the set of interactions between \(\log\text{Exports}\) and the product group binary variables \(d\), and \(X\) the set of independent variables with their vector of coefficients \(\gamma\) and \(\epsilon\) the residual.

The set of independent variables \((X)\) includes (the log of) GDP, GDP growth and ULC for the reporter \((i)\) and partner countries \((j)\) and the geographical and cultural distance between them.
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