

Section 3 Foreign exchange trends and corporate practices, and effects on export volume

In this section, we look at the relationship between the foreign exchange trends and corporate practices regarding production bases and export prices, and the effects on export volume.

1. Foreign exchange trends and corporate practices regarding production bases

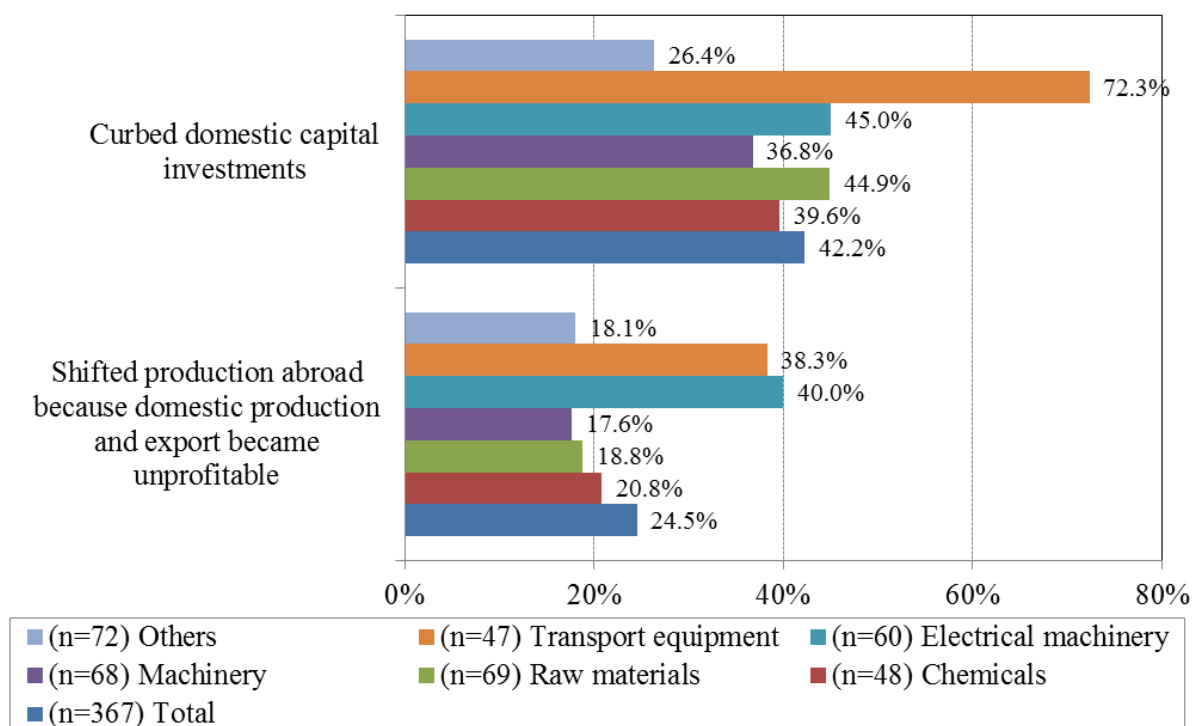
First, we look at the relationship between the foreign exchange trends and corporate practices regarding production bases.

According to the “Research on Firms' Pricing Activities Corresponding to Exchange Rate Fluctuations” questionnaire survey (2014), in the transport equipment and electrical machinery sectors, many companies curbed domestic capital investments or shifted production abroad amid the yen appreciation that began in the middle of 2008 because domestic production and export became unprofitable (Figure I-2-3-1).

In the yen-weakening phase since November 2012, 82.6% of Japanese companies have not changed their investment plans for domestic production facilities, while 10.9% expanded their investment plans. Meanwhile, regarding investment plans for overseas production facilities, around three quarters of Japanese companies with overseas production bases have not changed their investment plans, while around a quarter have expanded their investment plans. The proportion of companies that have expanded their plans is large in the transport equipment sector (Figures I-2-3-2 and I-2-3-3).

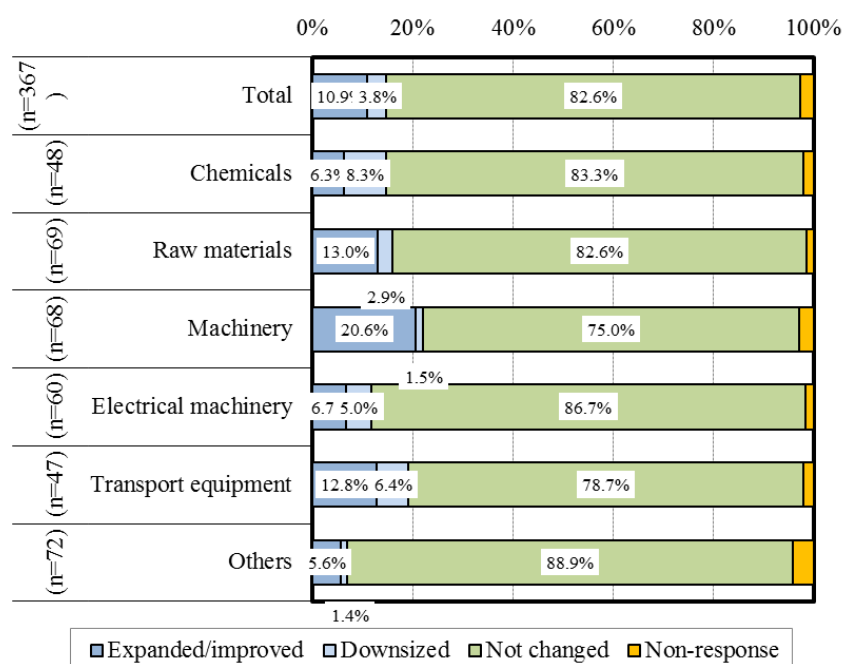
Among the reasons cited by many companies for not expanding or changing investment plans for overseas production facilities in the yen-weakening phase were “Expecting growth in overseas demand” and “Stepping up local production and sales in order to prevent corporate earnings from being affected by foreign exchange movements.” By sector, more companies cited “Stepping up local production and sales in order to prevent corporate earnings from being affected by foreign exchange movements” in the electrical machinery and transport equipment sectors than in other sectors. On the other hand, in the chemicals sector, “Making a shift abroad regardless of foreign exchange movements because the domestic market is expected to shrink due to the population decline” was cited the largest proportion of companies (I-2-3-4).

Figure I-2-3-1 Impact on management strategy (during the yen-strengthening phase since the mid-2008)



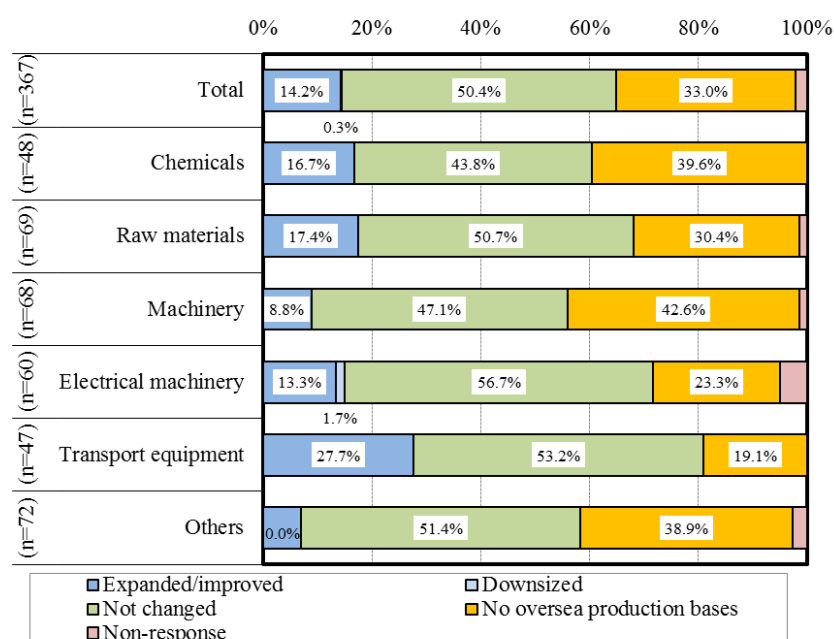
Source: *KAWASEHENDO NI TAISURU KIGYO NO KAKAKUSETTEIKOUDOUNADO NI TSUITENO CHOSABUNSEKI* (Research on Firms' Pricing Activities Corresponding to Exchange Rate Fluctuations) (Mitsubishi UFJ Research and Consulting Co., Ltd.).

Figure I-2-3-2 Impact on domestic production facilities (during the yen-weakening phase since Nov. 2012)



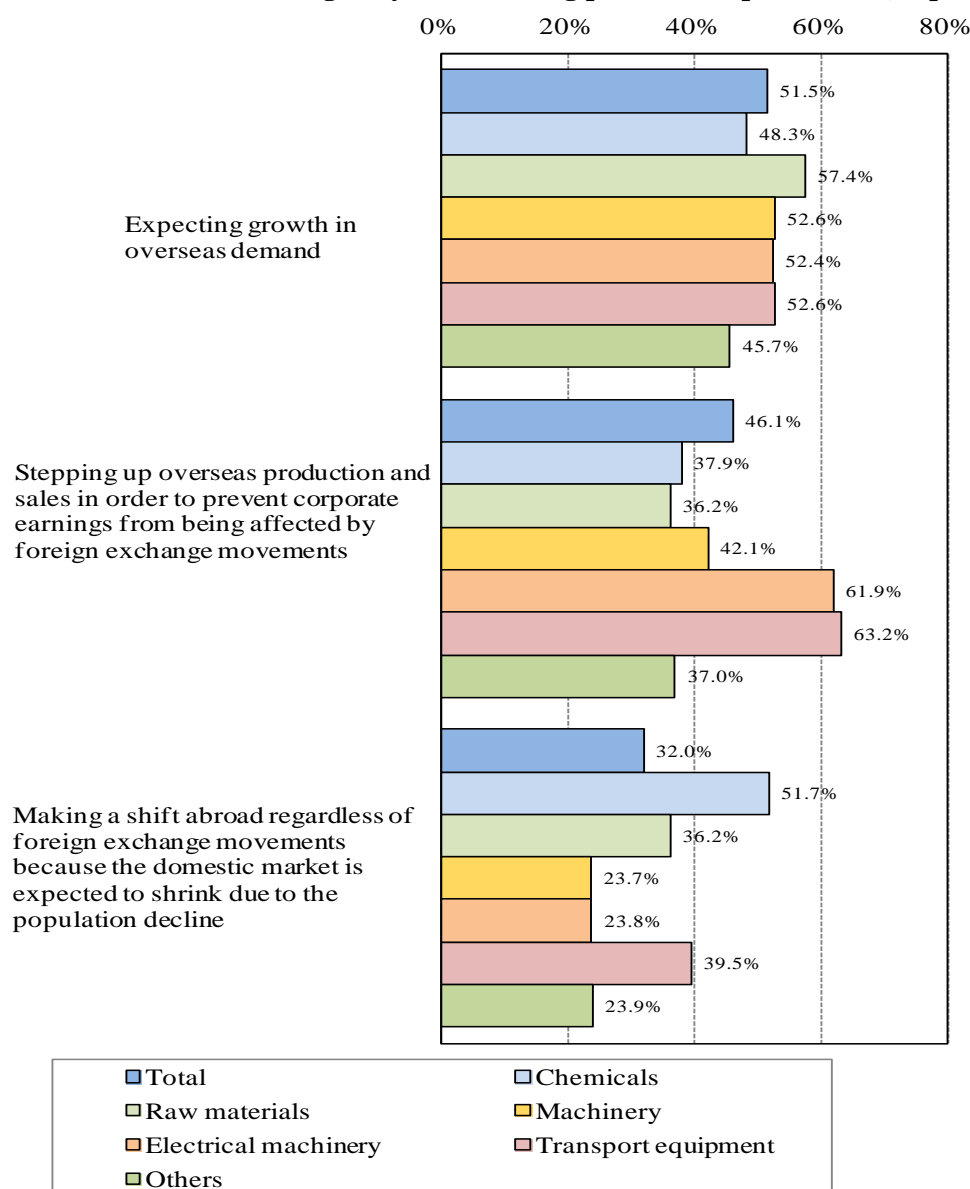
Source: KAWASEHENDO NI TAISURU KIGYO NO KAKAKUSETTEIKOUDOUNADO NI TSUITENO CHOSABUNSEKI (Research on Firms' Pricing Activities Corresponding to Exchange Rate Fluctuations) (Mitsubishi UFJ Research and Consulting Co., Ltd.).

Figure I-2-3-3 Impact on overseas production facilities (during the yen-weakening phase since Nov. 2012)



Source: KAWASEHENDO NI TAISURU KIGYO NO KAKAKUSETTEIKOUDOUNADO NI TSUITENO CHOSABUNSEKI (Research on Firms' Pricing Activities Corresponding to Exchange Rate Fluctuations) (Mitsubishi UFJ Research and Consulting Co., Ltd.).

Figure I-2-3-4 Reasons for expanding or not changing the investment plans for domestic production facilities even during the yen-weakening phase (multiple answers; top three answers)



Source: *KAWASEHENDONI TAISURU KIGYO NO KAKAKUSETTEIKOUDOUNADO NI TSUITENO CHOSABUNSEKI (Research on Firms' Pricing Activities Corresponding to Exchange Rate Fluctuations)* (Mitsubishi UFJ Research and Consulting Co., Ltd.).

2. Foreign exchange trends and corporate practices regarding export prices

Next, we look at the relationship between the foreign exchange trends and corporate practices regarding export prices.

As for the trends in foreign exchange rates and export prices (contractual currency basis) since 2000, when the yen weakened between 2005 and 2007 and between late 2012 and 2013, export prices declined only slightly. Meanwhile, when the yen strengthened starting in the middle of 2008, export prices did not rise significantly. Thus, export price movements were not closely linked to foreign exchange movements: either the weakening or strengthening of the yen (Figure I-2-3-5).

Export prices by export item (contractual; currency basis) since 2000 showed little inclination to move in tandem with foreign exchange movements. Regarding electric and electronic products, export prices declined in line with market prices around the world (Figure I-2-3-6).

As for export price movements in 2012-2013, a more detailed item-by-item breakdown shows that export prices declined somewhat in line with the yen's weakening in 2013 with regard to engines for motor vehicles, parts and accessories for motor vehicles, metal and related products, information and communications equipment, etc. However, at the present moment, export prices of many items do not show movements linked to foreign exchange movements (Figure I-2-3-7).

As for corporate practices examined based on the results of the questionnaire survey, 11.6% of Japanese companies raised export prices during the yen-strengthening phase that started in the middle of 2008 on an all-industry basis, while 71.6% kept export prices almost unchanged (Figure I-2-3-8).

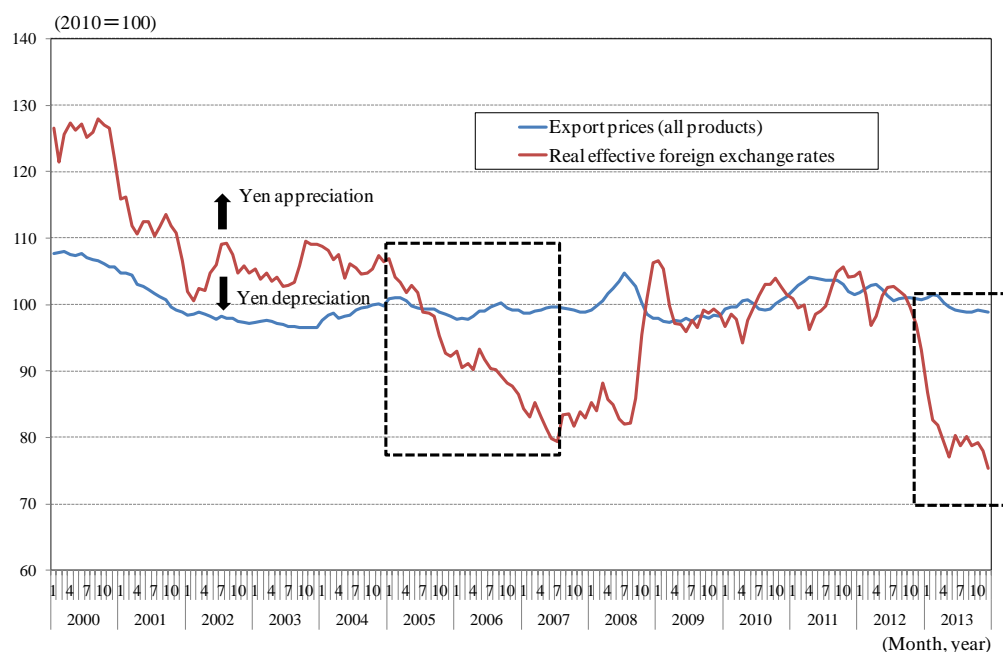
Among the reasons cited by a large proportion of companies in the chemicals and raw materials sectors for keeping export prices unchanged during the yen-strengthening phase that started in the middle of 2008 were "A price hike would lead to lower sales due to intense price competition with rival companies". In the transport equipment and machinery sectors, "Prices are revised when product models change" was also cited by a large proportion of companies (Figure I-2-3-9).

During the yen-weakening phase since November 2012, 11.0% of Japanese companies, regardless of company size or value of export, reduced export prices, while 78.1% kept export prices almost unchanged. In this the yen-weakening phase, of the companies which kept export prices almost unchanged, 87.2% have no plan for the moment to reduce export prices (Figures I-2-3-10 and I-2-3-11).

On an all-industry basis, among the reasons cited by a large proportion of companies for having no plan to reduce export prices in the yen-weakening phase were "Increased sales not expected to result from price reductions" and "Prices are revised when product models change but there are no plans to do so at present". By sector, a large proportion of companies cited "Prices are revised when product models change but there are no plans to do so at present" in the transport equipment sector." However, the proportion of companies which cited "Increased sales not expected to result from price reductions" was small compared with in other sectors. In contrast, in the chemicals and raw materials sectors, the proportion of companies that cited "Prices are revised when product models change but there are no plans to do so at present" in the transport equipment sector" was relatively low while the proportion of companies which cited "Increased sales not expected to result from price reductions" or "If prices are

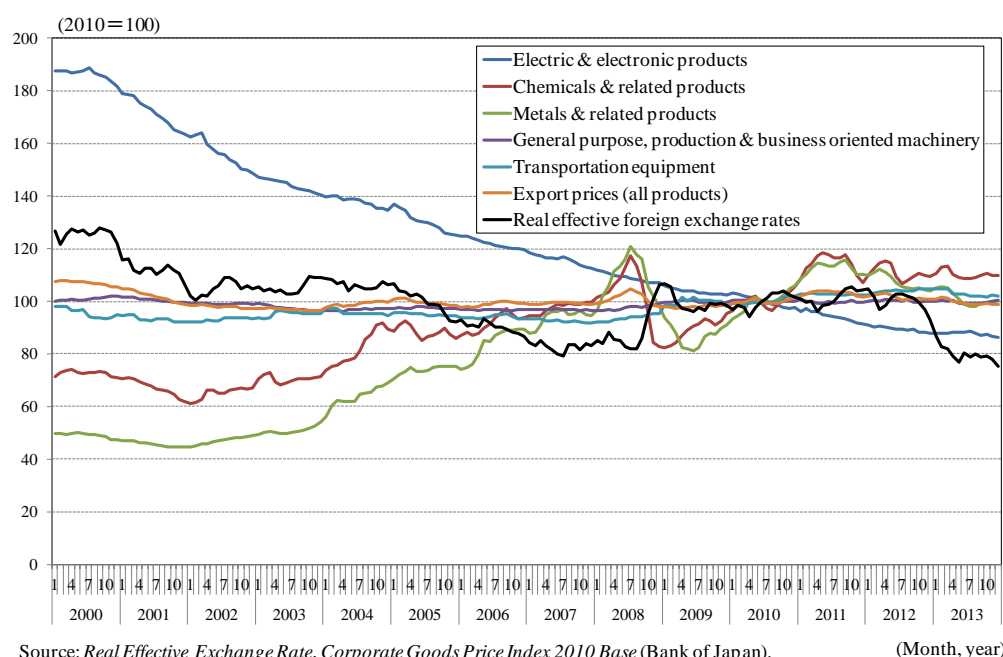
reduced, it will be impossible to absorb cost increases, such as fuel cost increases” was large (Figure I-2-3-12). Meanwhile, in the future, the proportion of companies that reduce prices may increase depending on foreign exchange rate stability and the condition of the world economy.

Figure I-2-3-5 Trends in real effective foreign exchange rates and export prices (all products; contractual currency basis)



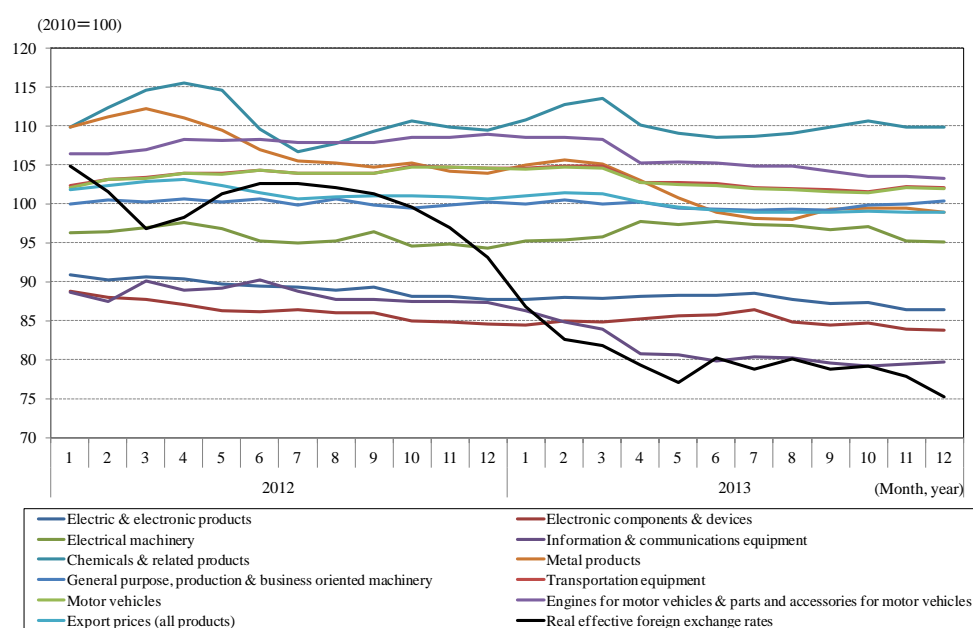
Source: *Real Effective Exchange Rate, Corporate Goods Price Index 2010 Base* (Bank of Japan).

Figure I-2-3-6 Trends in real effective foreign exchange rates and export prices (by item; contractual currency basis)



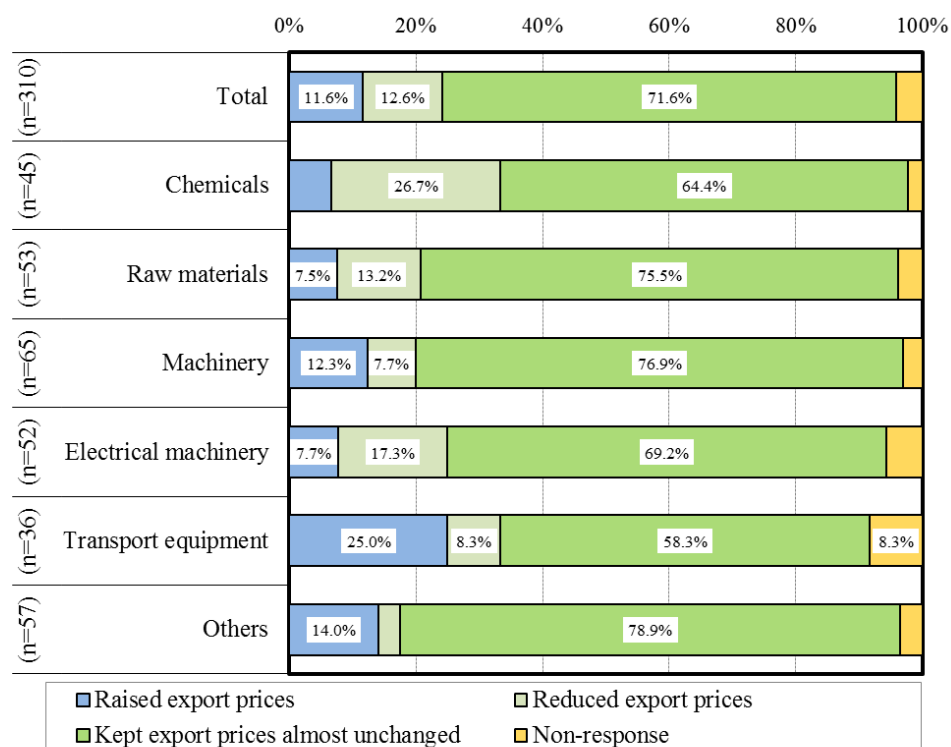
Source: *Real Effective Exchange Rate, Corporate Goods Price Index 2010 Base* (Bank of Japan).

Figure I-2-3-7 Trends in real effective foreign exchange rates and export prices from 2012 to 2013 (by item; contractual currency basis)



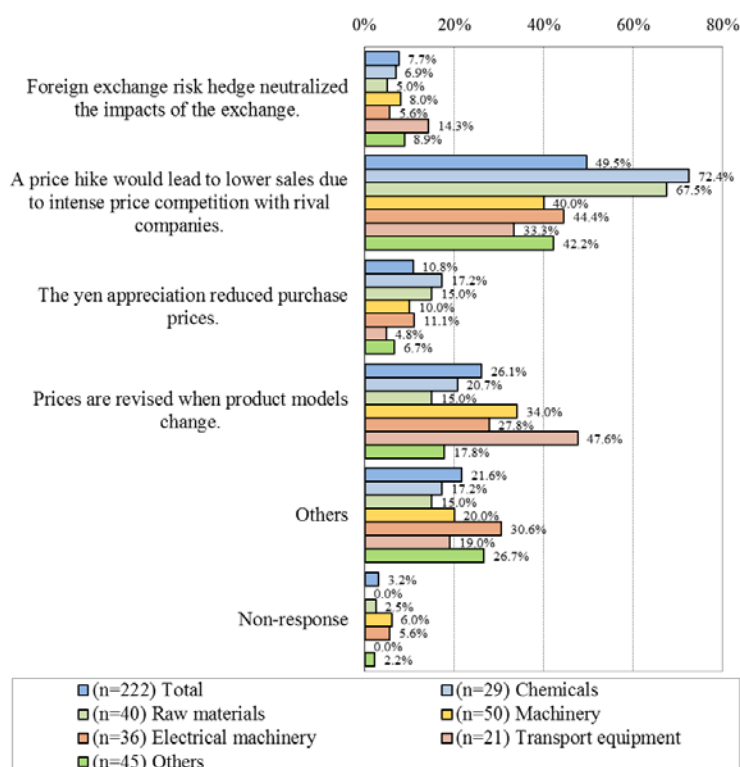
Source: Real Effective Exchange Rate, Corporate Goods Price Index 2010 Base (Bank of Japan).

Figure I-2-3-8 Export price change of major export products on a contractual currency basis (during the yen-strengthening phase from the mid-2008 to the end of 2010)



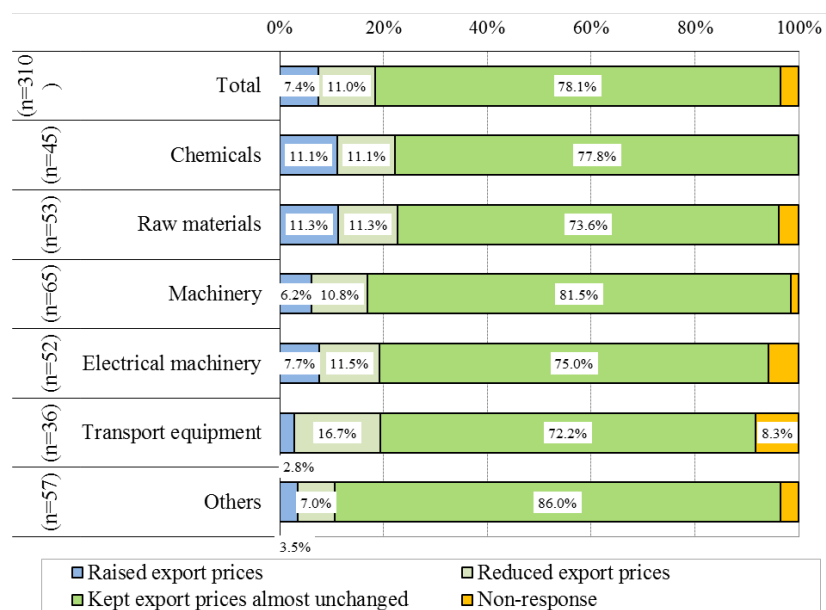
Source: KAWASEHENDO NI TAISURU KIGYO NO KAKAKUSETTEIKOUDOUNADO NI TSUITENO CHOSABUNSEKI (Research on Firms' Pricing Activities Corresponding to Exchange Rate Fluctuations) (Mitsubishi UFJ Research and Consulting Co., Ltd.).

Figure I-2-3-9 Reasons for keeping export prices unchanged (during the yen-strengthening phase from the mid-2008 to the end of 2010)



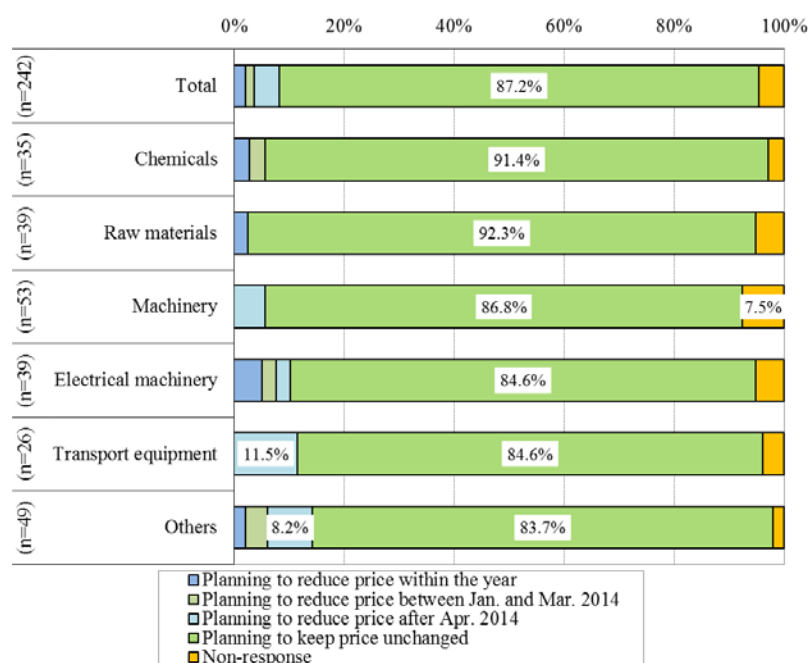
Source: KAWASEHENDO NI TAISURU KIGYO NO KAKAKUSETTEIKOUDOUNADO NI TSUITENO CHOSABUNSEKI (Research on Firms' Pricing Activities Corresponding to Exchange Rate Fluctuations) (Mitsubishi UFJ Research and Consulting Co., Ltd.).

Figure I-2-3-10 Export price change of major export products on a contractual currency basis (during the yen-weakening phase since Nov. 2012)



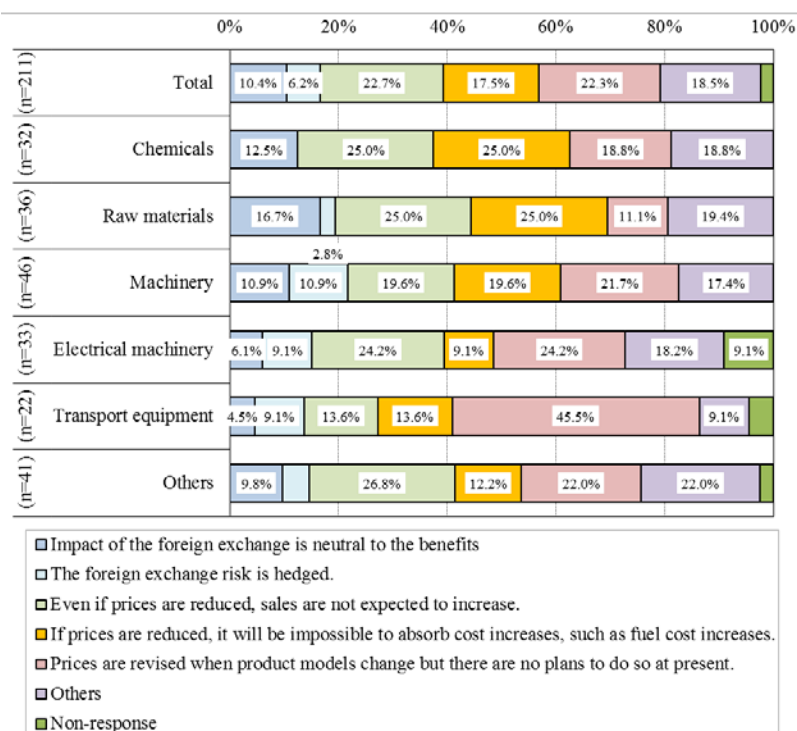
Source: KAWASEHENDO NI TAISURU KIGYO NO KAKAKUSETTEIKOUDOUNADO NI TSUITENO CHOSABUNSEKI (Research on Firms' Pricing Activities Corresponding to Exchange Rate Fluctuations) (Mitsubishi UFJ Research and Consulting Co., Ltd.).

Figure I-2-3-11 Plan for changing future import price concerning companies that did not change the price (during the yen-weakening phase since Nov. 2012)



Source: KAWASEHENDO NI TAISURU KIGYO NO KAKAKUSETTEIKOUDOUNADO NI TSUITENO CHOSABUNSEKI (Research on Firms' Pricing Activities Corresponding to Exchange Rate Fluctuations) (Mitsubishi UFJ Research and Consulting Co., Ltd.).

Figure I-2-3-12 Reasons for not reducing the future export price (from Nov. 2012 during the yen-weakening phase)



Source: KAWASEHENDO NI TAISURU KIGYO NO KAKAKUSETTEIKOUDOUNADO NI TSUITENO CHOSABUNSEKI (Research on Firms' Pricing Activities Corresponding to Exchange Rate Fluctuations) (Mitsubishi UFJ Research and Consulting Co., Ltd.).

3. Trends in companies' export volume due to foreign exchange movements

Here, we look at trends in companies' export volumes due to foreign exchange movements based on the results of the questionnaire survey.

First, during the yen-strengthening phase that started in the middle of 2008, 45.2% of companies said "Export volume remained almost unchanged" on an all-industry basis and 33.5% said their export volume "declined". By sector, the proportion of companies that said their export volume declined came to 46.2% in the machinery sector, higher than the 35.4% that said their export volume "remained almost unchanged". On the other hand, the proportion of companies that said their export volume "increased" was higher than the proportion of those that said their export volume "declined" only in the chemicals sector (Figure I-2-3-13).

As to why the export volume "declined," "A decline in overseas demand due to the collapse of Lehman Brothers" was cited as a reason by the largest proportion of companies on an all-industry basis, followed by "A decline in price competitiveness due to the strong yen". In the transport equipment sector, a particularly large proportion of companies cited "A decline in price competitiveness due to the strong yen" (Figure I-2-3-14).

Next, in the yen-weakening phase since November 2012, 56.5% of companies said "Export volume remained almost unchanged" and 31.9% said their export volume "increased" on an all-industry basis. By sector, the proportion of companies that said their export volume "increased" came to 37.8% in the chemicals sector, higher than the proportion of companies that said their export volume "declined" or "remained almost unchanged". Meanwhile, in the transport equipment sector, 27.8% said their export volume "increased". In the raw materials sector, while the proportion of companies that said their export volume "increased" was large, the proportion of those that said their export volume "declined" was also relatively large compared with in other sectors (Figure I-2-3-15).

As to why export volume increased, "Increased overseas demand" was cited as a reason by the largest proportion of companies on an all-industry basis, followed by "Local prices declined due to the weak yen although yen-based export prices were not reduced." The proportion of companies that cited "Price competitiveness increased due to reduced export prices on a contractual currency basis" was generally lower than the proportions of companies that cited the previous two reasons (Figure I-2-3-16).

So far, we have looked at the relationship between the foreign exchange trends and corporate practices regarding production bases and export prices, and the effects on export volume.

At the moment, a strong linkage is not observed between the foreign exchange trends and corporate practices regarding production bases and export prices. Companies may be keeping a close watch on overseas demand trends and the stability of foreign exchange rate levels. On the other hand, as for the effects on export volumes, many companies pointed out the effects of overseas demand trends regardless of foreign exchange rate levels. However, a relatively large proportion of companies pointed out a decline in price competitiveness due to a strong yen with regard to a drop in export volume in the yen-strengthening phase and cited a decline in local prices due to a weak yen despite the absence of reduction of yen-based export prices with regard to a certain increase in export volume in

the yen-weakening phase.

Figure I-2-3-13 Trends in export volume of major export products (during the yen-strengthening phase from the mid-2008 to the end of 2010)

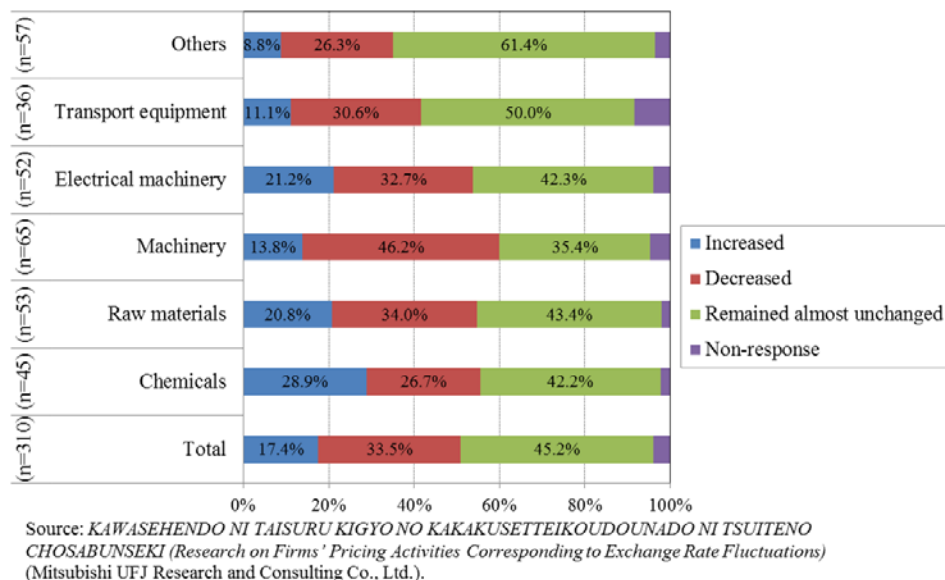


Figure I-2-3-14 Reasons for declining export volume (during the yen-strengthening phase from the mid-2008 to the end of 2010)

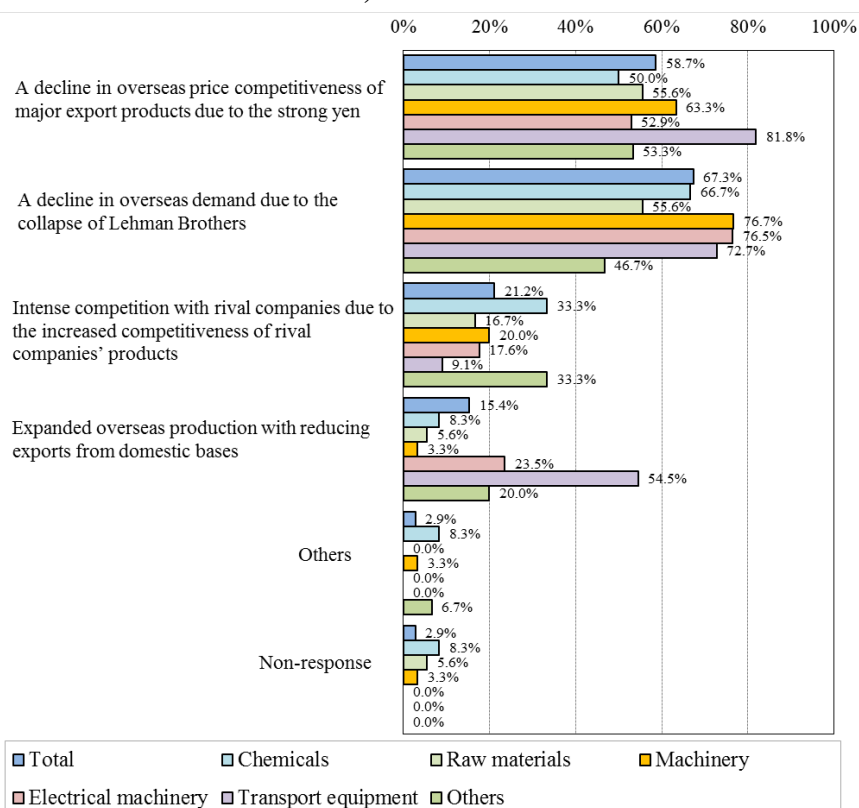
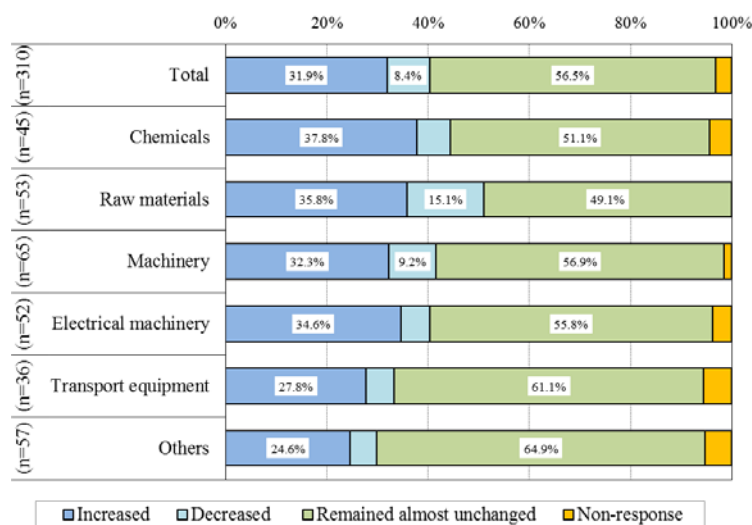
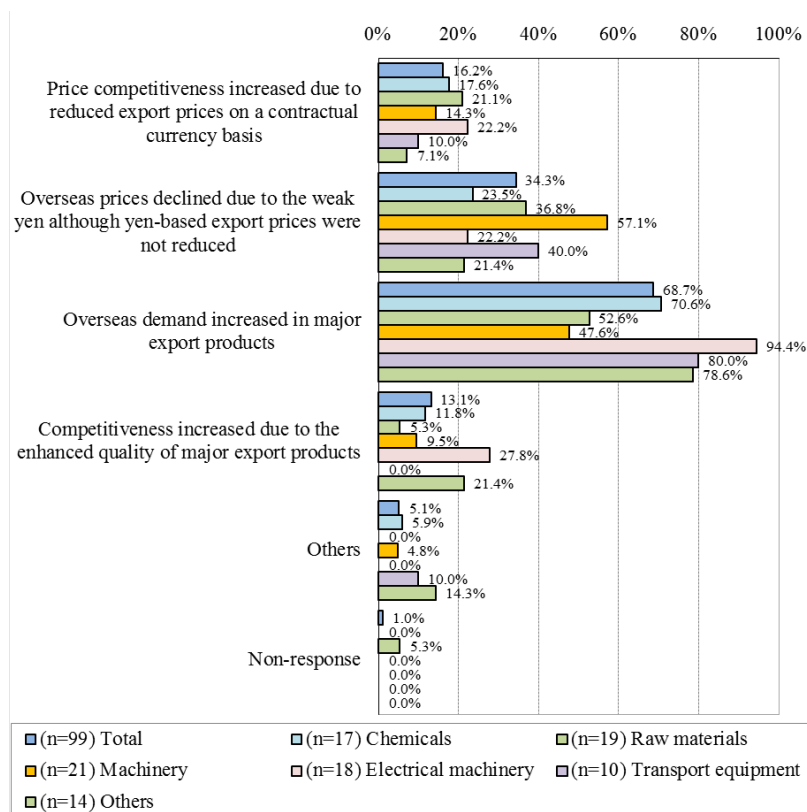


Figure I-2-3-15 Trends in export volume of major export products (during the yen-weakening phase since Nov. 2012)



Source: KAWASEHENDO NI TAISURU KIGYO NO KAKAKUSETTEIKOUDOUNADO NI TSUITENO CHOSABUNSEKI (Research on Firms' Pricing Activities Corresponding to Exchange Rate Fluctuations) (Mitsubishi UFJ Research and Consulting Co., Ltd.).

Figure I-2-3-16 Reasons for increasing export volume (during the yen-weakening phase since Nov. 2012)



Source: KAWASEHENDO NI TAISURU KIGYO NO KAKAKUSETTEIKOUDOUNADO NI TSUITENO CHOSABUNSEKI (Research on Firms' Pricing Activities Corresponding to Exchange Rate Fluctuations) (Mitsubishi UFJ Research and Consulting Co., Ltd.).

Column 3 Linkage between foreign exchange trends and export price movements in Germany and ROK

We will now look at foreign exchange trends and trends in export prices in Germany and ROK. First, Germany's main export destinations are European countries that use the same currency, the euro¹⁷, and euro-based transactions account for a large proportion of German exports to countries outside the euro area as well¹⁸. Since 2000, there has not been much linkage between the foreign exchange trends and export price movements (all products: Figure Column 3-1). In addition, in the past four years, there has not been a particular linkage between export prices by item and the foreign exchange trends. While export prices of electronics and precision equipment have continued to decline, those of other items have been rising moderately (Figure Column 3-2).

As for trends in ROK since 2000, foreign exchange rates and export prices (industrial products as a whole) showed similar movements until around 2010. However, recently, there has not been significant linkage between the two (Figure Column 3-3). By item, export prices of engines for motor vehicles, parts and accessories for motor vehicles, basic metal products and chemicals and foreign exchange rates showed similar movements until around 2010 but such linkage between the two has been only occasionally observed recently. Export prices of electrical and electronic products, information and communications equipment and audio and visual apparatus have continued to decline steeply (Figure Column 3-4).

¹⁷ Exports to EU27 account for approximately 57% of the overall value of Germany's exports (2012).

¹⁸ Exports to the euro area account for approximately 37% of the overall value of Germany's exports.

While exports to regions other than the EU account for approximately 43%, euro-based exports account for 65%. As a result, euro-based exports account for approximately 65% of the overall value of German exports, higher than the proportion of yen-based exports in the overall value of Japan's exports.

Figure Colum 3-1 Trends in real effective foreign exchange rates and export prices in Germany (all products; domestic currency basis)

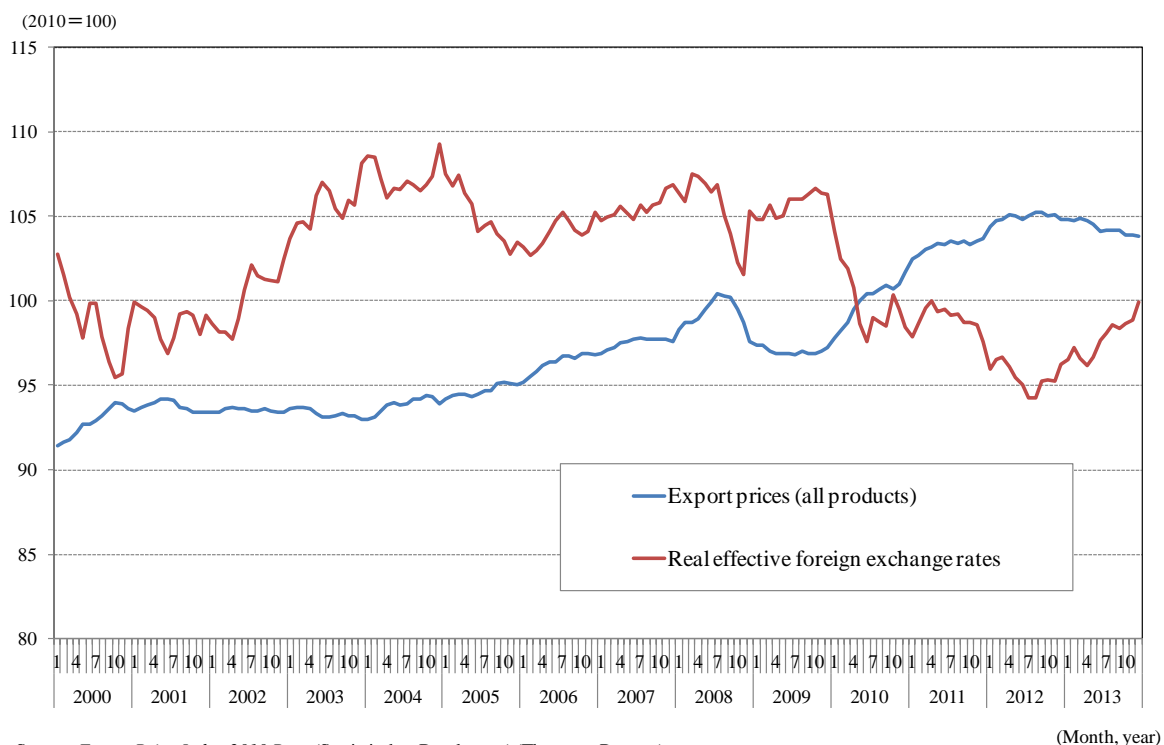
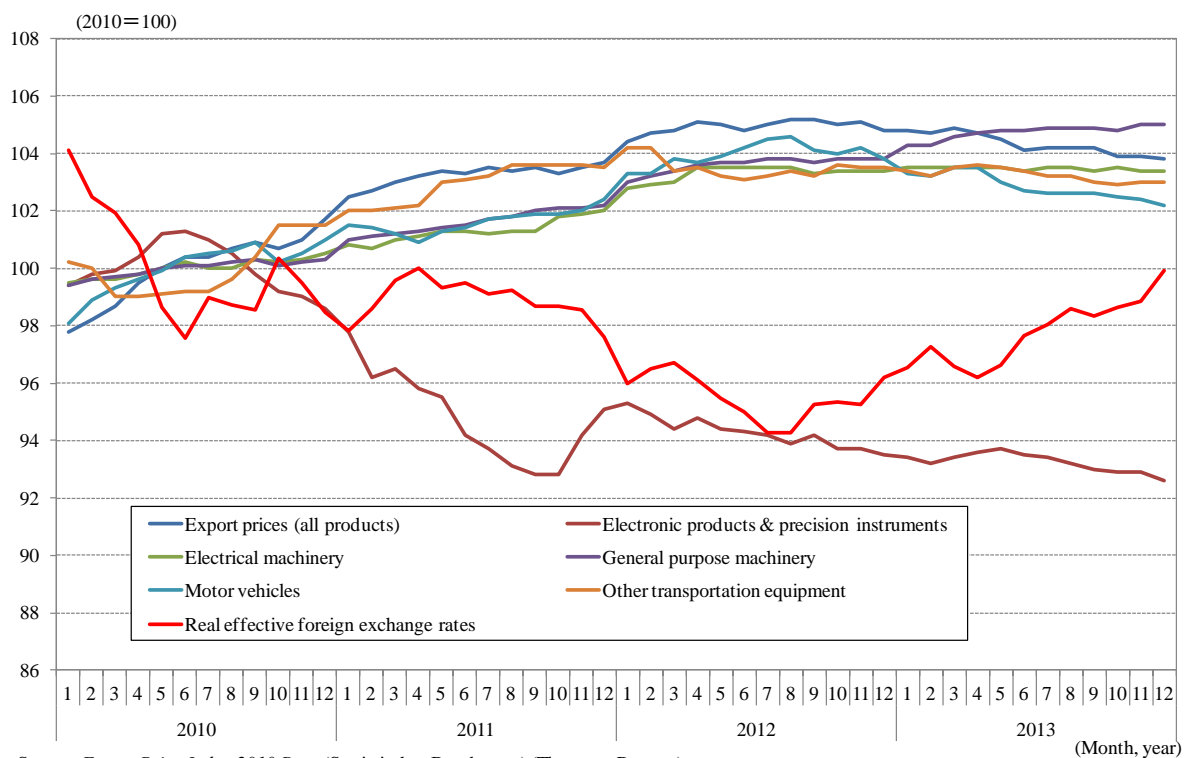


Figure Colum 3-2 Trends in real effective foreign exchange rates and export prices in Germany (by item; domestic currency basis)



(2010=100)

— Export prices (all industrial products)
— Real effective foreign exchange rates

(Month, year)

(2010=100)

Y-axis labels: 0, 50, 100, 150, 200, 250, 300, 350, 400

X-axis labels: 1 5 9 (repeated for each year), 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013

Legend:

- Electric & electronic products
- Basic metals products
- Metals products
- Machinery
- Electric & electronic products
- Electrical machinery & equipment
- Information & communications equipment
- Transport equipment
- Motor vehicles
- Engines for motor vehicles & parts and accessories for motor vehicles
- Export prices (all industrial products)
- Real effective foreign exchange rates

Source: *Export Price Index 2010 Base* (Bank of Korea) (Thomson Reuters)