Section 3　Growth strategies of Mexico and Brazil

Brazil and Mexico continued to record high economic growth until the 1970s, but thereafter their economies slowed down significantly as a result of hyperinflation and debt and currency crises. When they faced these crises, the two countries adopted quite contrasting policies. A look at changes in the two countries' top 10 export items show that both of them exported mainly primary goods from the 1970s to the 1980s. However, since the 1990s, the trends diverged considerably between the two countries (Table II-2-3-1). Namely, Brazil has continued to export mainly agricultural products and other primary goods, and this trend has recently strengthened further. In contrast, Mexico has made a major shift in export items and now exports mainly industrial products. Moreover, while Brazil's GDP is larger than Mexico's, the value of exports in Mexico is larger than Brazil's. Mexico's value of exports as a percentage of GDP is around 30% compared with around 10% for Brazil (Figure II-2-3-2).

Below, we look at how Brazil and Mexico overcame their economic crises and how their economic structures changed as a result.

Table II-2-3-1　Export structure of Brazil and Mexico

Brazil's Major Exports

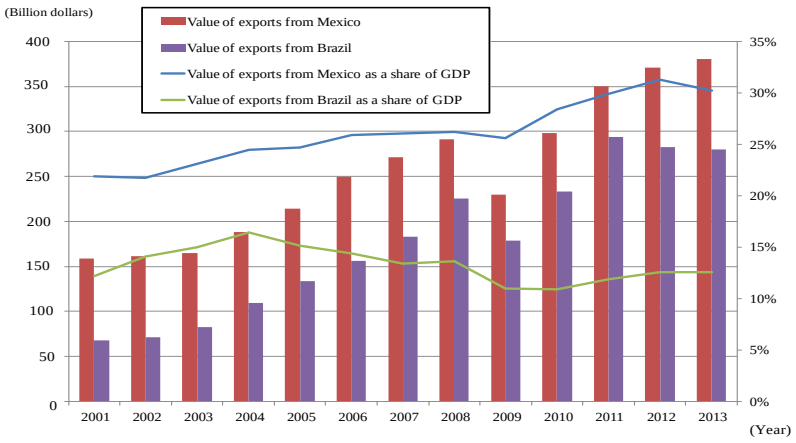
	1970	1975	1980	1985	1990	1995	2000	2005	2010	2011
1st	Coffee 34.6%	Raw sugar 11.4%	Coffee 12.4%	Coffee 9.2%	Iron ore 7.7%	Iron ore 5.5%	Aircraft 6.3%	Iron ore 6.2%	Iron ore 14.3%	Iron ore 16.3%
2nd	Iron ore 7.7%	Iron ore 10.8%	Iron ore 7.7%	Iron ore 6.5%	Soybean meal 5.3%	Soybean meal 4.4%	Iron ore 5.5%	Soybeans 4.5%	Crude oil 8.0%	Crude oil 8.4%
3rd	Raw cotton 5.7%	Coffee 10%	Soybean meal 7.5%	Petroleum products 6.3%	Juice 4.8%	Coffee 4.2%	Soybeans 4.0%	Petroleum products 4.1%	Soybeans 5.4%	Soybeans 6.4%
4th	Raw sugar 4.7%	Soybeans 8%	Raw sugar 4.7%	Soybean meal 4.7%	Coffee 3.5%	Raw sugar 3.1%	Motor vehicles 3.2%	Motor vehicles 3.7%	Raw sugar 4.6%	Raw sugar 4.5%
5th	Maize 3.0%	Fruit & nuts 5.6%	Petroleum products 3.0%	Juice 3.1%	Footwear & parts thereof 3.5%	Timber & pulp 3.1%	Soybean meal 3.0%	Crude oil 3.5%	Chicken 2.6%	Petroleum products 3.7%
6th	Cacao 2.9%	Cacao 2.6%	Motor vehicles 3.0%	Footwear & parts thereof 3.5%	Aluminum 3.0%	Crude steel 2.9%	Coffee 2.8%	Chicken 3.0%	Coffee 2.6%	Coffee 3.1%
7th	Soybean meal 2.8%	Petroleum products 2.1%	Soybean oil 2.2%	Soybeans 3.0%	Soybeans 2.9%	Motor vehicles 2.9%	Timber & pulp 2.8%	Aircraft 2.7%	Chicken 3.1%	Chicken 3.1%
8th	Beef 2.6%	Timber & pulp 1.9%	Soybeans 2.0%	Engines 2.5%	Engines 2.8%	Aluminum 2.7%	Footwear & parts thereof 2.5%	Soybean meal 2.4%	Soybean meal 2.3%	Soybean meal 2.2%
9th	Timber 2.5%	Footwear & parts thereof 1.9%	Footwear & parts thereof 1.9%	Motor vehicles 2.4%	Crude steel 2.4%	Motor vehicle components 2.6%	Motor vehicle components 2.2%	Communications equipment components 2.3%	Timber & pulp 2.3%	Timber & pulp 1.8%
10th	Liquid coffee extract 1.6%	Soybean oil 1.8%	Juice 1.8%	Soybean oil 2.4%	Petroleum products 2.2%	Juice 2.4%	Aluminum 2.1%	Coffee 2.1%	Motor vehicles 2.2%	Motor vehicles 1.7%
Share	68.10%	56.10%	46.20%	43.60%	38.10%	33.80%	34.40%	34.50%	47.80%	50.90%
										$256.0 billion

Mexico's Major Exports

	1970	1975	1980	1985	1990	1995	2000	2005	2010	2011
1st	Raw sugar 7.7%	Crude oil 15.3%	Crude oil 60.9%	Crude oil 57.2%	Crude oil 33.9%	Motor vehicles 9.5%	Motor vehicles 9.9%	Crude oil 13.2%	Crude oil 12.0%	Crude oil 14.1%
2nd	Raw cotton 7.0%	Coffee 6.8%	Natural gas 4%	Petroleum products 7.4%	Motor vehicles 9.9%	Crude oil 9.3%	Crude oil 8.9%	Motor vehicles 6.3%	Motor vehicles 7.7%	Motor vehicles 7.6%
3rd	Coffee 6.3%	Raw cotton 6.1%	Coffee 2.9%	Engines 7.1%	Engines 5.3%	Insulated cables 4.3%	Calculators 4.9%	Televisions 4.8%	Televisions 7.0%	Televisions 5.4%
4th	Shrimp & octopus 5.5%	Shrimp & octopus 5.1%	Shrimp & octopus 2.6%	Coffee 2.4%	Petroleum products 2.4%	Televisions 3.7%	Insulated cables 4.0%	Motor vehicle components 4.6%	Communications equipment 6.1%	Motor vehicle components 4.8%
5th	Beef 3.6%	Fresh tomatoes 4.3%	Silver 2.4%	Silver 1.7%	Fresh vegetables 1.7%	Engines 3.5%	Communications equipment 3.1%	Calculators 4.3%	Motor vehicle components 4.6%	Calculators 4.7%
6th	Fresh tomatoes 3.0%	Raw sugar 4.1%	Raw cotton 2.0%	Shrimp & octopus 1.6%	Fresh tomatoes 1.6%	Motor vehicle components 2.8%	Televisions 3.5%	Communications equipment 3.7%	Calculators 4.5%	Communications equipment 4.5%
7th	Petroleum products 2.6%	Copper 2.3%	Petroleum products 1.6%	Motor vehicle components 1.1%	Motor vehicle components 1.4%	Electrical components 2.6%	Motor vehicle components 3.5%	Insulated cables 3.4%	Trucks 3.6%	Trucks 3.6%
8th	Live cattle	Motor vehicle components 1.9%	Motor vehicle components 1.3%	Live cattle 0.8%	Coffee 1.4%	Communications equipment 2.6%	Electrical components 3.1%	Trucks 3.3%	Insulated cables 2.2%	Gold 2.3%
9th	Lead 2.3%	Feldspar 1.9%	Fresh vegetables 1.1%	Fresh tomatoes 0.8%	Calculators 1.3%	Trucks 2.3%	Trucks 2.9%	Electrical components 2.6%	Engines 2.0%	Insulated cables 2.2%
10th	Feldspar 2.4%	Lead 1.6%	Iron ore 1.1%	Polyethylene 0.7%	Live cattle 1.3%	Generators 2.2%	Generators 2.8%	Engines 2.2%	Electrical components 2.1%	Engines 2.2%
Share	43%	49.40%	79.90%	80.80%	60.20%	42.80%	47.50%	48.40%	51.80%	51.40%
										$349.5 billion

Notes: The percentages at the bottom of each table indicate the share of all exports accounted for by these top ten exports. All values are based on the value of both countries' exports in 2011.
Green indicates primary commodities and their processed derivatives. Yellow indicates industrial products.
Source: 2013 annual report of the United Nations Economic Commission for Latin America and the Caribbean.

Figure II-2-3-2　Trends in the value of exports from Brazil and Mexico and values as a share of GDP



Source: Data obtained from the IBGE (Brazilian Institute of Geography and Statistics), INEGI (Mexican National Institute of Statistics and Geography), and the CEIC Database.

1. Risk tolerance

Based on the lesson of the past crises, which was that the vulnerability of the economic structure causes crises, both Brazil and Mexico have made efforts to strengthen their economic fundamentals and have enhanced their capability to make policy responses to crises. As a result, in recent years, their risk tolerance has grown compared with at the time of the past economic crises as shown by Table II-2-3-3, although there is the possibility that their economies may be shaken by sudden changes in the external financial environment. For example, although Brazil's inflation rate is still relatively high, it is much more stable compared with the period of hyperinflation. Meanwhile, Mexico's current account balance has improved.

Table II-2-3-3 Comparison of economic indicators during past crises in Brazil and Mexico

Country / comparison item	Brazil			Mexico		
	1990	1999	2013	1982	1994	2013*(1)
Current account balance (billion dollars)	-3.8	-25.3	-81.4	-5.9	-29.7	-1.6
Current account balance (% of GDP)	-0.8%	-4.3%	-3.6%	-2.7%	-5.6%	-0.5%
Inflation rate Annual average (%)	2947%	4.9%	6.4%	59.2%	7.0%	3.8%
Fiscal balance (% of GDP)	1990	1999	2013	1982	1994	2013
	—*(2)	-5.3%	-3.3%	-14.7%	-0.1%	-3.9%
Short-term external debt (% of foreign exchange reserves) *(3)	1990	1999	2013	1982	1994	2013
	260%	75.4%	9.1%	—	39.3%	22.6%
Swap agreements with the U.S.	2008 $30.0 billion			2008 $30.0 billion		
IMF Flexible Credit Line				$73.0 billion		*(4)
	2001	2012		2001		2013*(5)
Bank capital adequacy ratio (%)	14.9%	16.7%		14.7%		16.6%

Notes:
(1) In the figures for Brazil, 1990 was the year when hyperinflation was at its most severe, while 1999 was the year of the Asian financial crisis. In the figures for Mexico, 1982 was the year of its debt crisis, while 1994 was the year of its currency crisis (comparison between past financial crises and 2013).
(2) Fiscal balance data for Brazil in 1990 are not available.
(3) Calculated on the basis of data from the World Bank and each country's central bank.
(4) The Flexible Credit Line is a credit line system designed to protect countries that have strong economic performance from international financial crises. For Mexico, it is set at a total of $73.0 billion. If a country passes the prior review, it can draw down from this credit line unconditionally. Mexico has never drawn down from it, but it can effectively serve as a foreign exchange reserve. It was first established in 2009. It was renewed in 2011 and stood at $73.0 billion as of 2012. Brazil has received loans and other assistance from the IMF in the past, but it has already repaid these in full, including its Paris Club debt and it has acquired the status of a net creditor.
(5) As of March 2013. Compiled from materials from IMF Article IV Consultations, apart from figures for Brazil in 2001 (figures obtained from the Central Bank of Brazil).
Source: IMF, World Bank, Banco de Mexico (central bank), Central Bank of Brazil.

Column 10 Brazil's success in overcoming hyperinflation

From the 1940s onward, Brazil achieved growth by actively promoting infrastructure development, including the building of a new capital, Brasilia. However, as a result of overheated demand and fiscal deterioration, Brazil was hit by inflation (an annual average inflation rate of 31%). Against this backdrop, social unrest arose, and a military regime was established following a coup d'état in 1964.

Under the military regime, inflation was initially curbed due to an austerity policy. Later, the country achieved an economic growth which was called the "miracle of Brazil" as a result of active public investment. However, after it was struck by two oil crises, Brazil experienced an economic stagnation that was called a "lost decade." In the 1970s, the inflation rate mostly stayed between 10% and 60%.

After a transition to civilian rule in 1985, a populist fiscal management accelerated inflation. Although the Cruzado Plan, which froze prices, wages and the exchange rate, was implemented, its effects were limited. Starting in the late 1980s, Brazil plunged into hyperinflation, with the inflation rate soaring to 2,948% in 1990. In 1994, the hyperinflation dramatically lessened following the introduction of the Real Plan, which pegged the Brazilian currency to the U.S. dollar, and in 1996, the inflation rate plummeted to 16%. Although the inflation rate in Brazil is still relatively high compared with other countries, it has mostly been in single digits[213].

Based on the experience of this hyperinflation, Brazil is still managing monetary policy in a manner that is very sensitive to inflationary pressure. In addition to adopting an inflation targeting policy, which seeks to guide the inflation rate to the target range (4.5%±2%) through policy interest rate adjustments, Brazil is striving to maintain fiscal discipline.

2. Growth strategy

(1) External economic policy

Following the debt crisis in 1982, Mexico shifted from an import substitution policy intended to protect and foster domestic industries to a free trade policy. First, Mexico transferred around 80% of the items covered by an import licensing system to a quota system in 1985. In 1986, Mexico acceded to GATT (which is now the WTO) and reduced the ratio of items covered by the import quota system from 83% at the beginning of 1985 to around 27% in 1986 in accordance with the protocol on accession. In addition, in order to stabilize inflation through international competition, it promoted trade liberation measures, such as lowering the top tariff rate to 20%[214]. On the other hand, Brazil acceded to GATT in 1948, but following the Mercosur (or *Mercado Común del Sur* regional trade agreement that was signed in 1991 and took effect in 1995), it set inter-regional and extra-regional tariff rates separately. According to the World Bank, until 2003, the average applied tariff rate (simple average basis) stayed at between 15 and 16% for both Brazil and Mexico, but in 2010, it stood at 2.8% for Mexico and 7.2% for Brazil (Figure II-2-3-4). Meanwhile, Mexico actively participated in establishing a free trade network involving countries and regions around the world and strengthened international economic partnerships, for example by acceding to NAFTA in 1994 and concluding 17 free trade agreements (FTAs) with 21 countries including Central and South American countries, European countries and Japan. However, Brazil has long continued a policy of protecting and fostering

[213] Yasushi Ninomiya (2011), *Burajiru Keizai no Kiso no Chishiki* 2nd ed., pp. 2-72 JETRO (in Japanese)
Ryohei Konta (ed.) (2013), *Yakudo Suru Burajiru – Atarashii Henyou to Chosen*, pp. 55-65, Institute of Developing Economies (in Japanese)
IMF, World Economic Outlook database, April 2014, Banco Central Do Brasil

[214] P. Aspe (1993), *Economic Transformation the Mexican Way*, The MIT Press, L.Agama, and C.A. McDaniel (2002), "The NAFTA Preference and U.S. -Mexico Trade" U.S. International Trade Commission

domestic industries and has basically focused mainly on economic partnerships with South American countries (Table II-2-3-5).

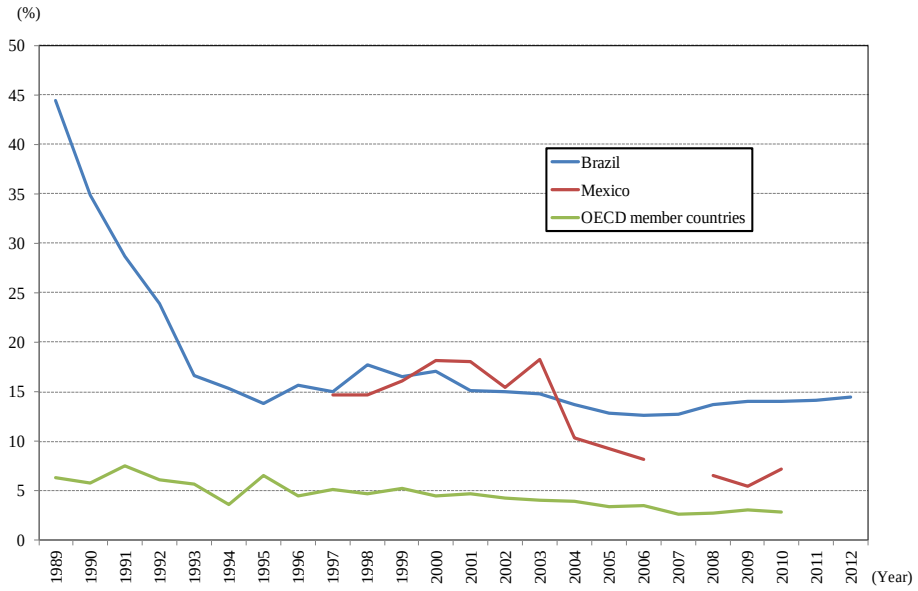
Moreover, Mexico has recorded an increase in inward foreign direct investments and has grown from a resource exporter to a manufacturing and export base of industrial products as a result of promoting deregulation of foreign ownership of Mexican companies and privatization (Figure II-2-3-6). Direct investments in Brazil have also increased in recent years (Figure II-2-3-7). In Mexico, direct investments in manufacturing industries in particular have increased, but in Brazil, services, mining and agricultural industries have attracted large amounts of direct investment.

As for Brazil's manufacturing industries, although some companies are internationally competitive, the proportion of primary goods in exports has grown and the proportion of industrial products has declined against the background of increasing resource demand and rising resource prices in recent years. Another possible background factor of the decline in the proportion of industrial products in exports is that manufacturing industries' production and exports face downward pressure from the overvaluation of the real due to a commodity boom[215] and the high level of policy interest rates and domestic loan rates due to concerns over inflationary pressure (Figure II-2-3-8)[216].

[215] According to the real effective exchange rates (Figure II-2-3-9) indicated in Ryohei Konta (ed.) (2013), *Yakudo Suru Burajiru – Atarashii Henyou to Chosen, pp 72-5,* Institute of Developing Economies, the exchange rate has tended to be higher in Mexico. However, as is clear from changes in major export product items indicated in Table II-2-3-1, Mexico mainly exported industrial products in the 1990s, while Brazil depended heavily on primary goods for export. When its currency appreciated, the Brazilian economy depended on services, for which trade is not very important, and presumably as a consequence of this, Brazil became a domestic demand-led economy.

[216] Compare this with "Figure II-2-3-10 Changes in Mexico's policy interest rate and inflation rate."

Figure II-2-3-4 Trends in tariff rates



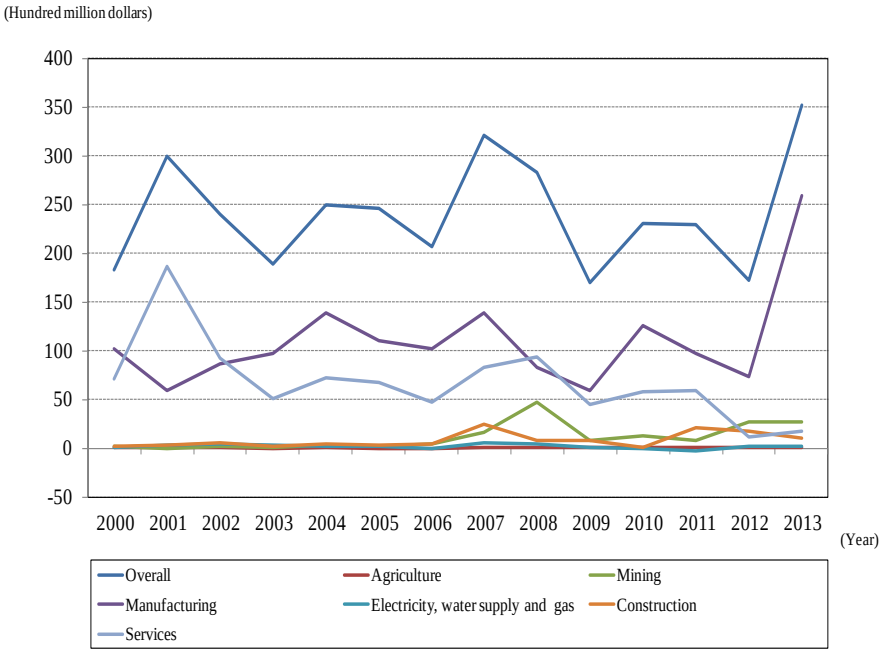
Notes: The break in the line for Mexico indicates that no data are available for this period. Simple average.
Source: *WDI* (World Bank).

Table II-2-3-5 FTAs concluded by Mexico and Brazil

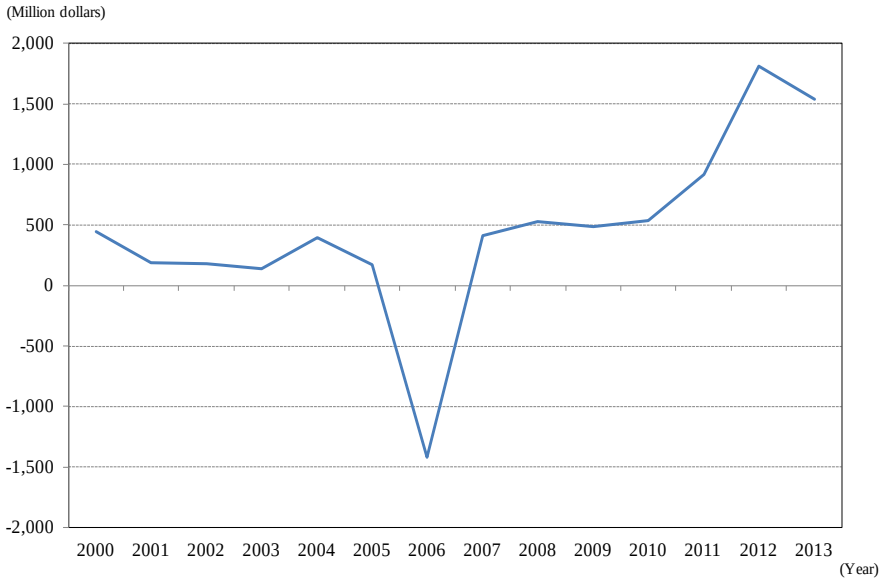
Mexico	Brazil
NAFTA: the U.S., Canada (1994)	Mercosur: Argentina,
Colombia, Venezuela (1995) (Note 1)	Uruguay, Paraguay (Note 5) (1991)
Costa Rica (1995) (Note 2)	Chile (Mercosur) (1996)
Nicaragua (1998)	Bolivia (Mercosur) (1996)
Chile (1999)	Mexico (Mercosur: Auto Sector Agreement) (2002)
Guatemala, El Salvador, Honduras (2001)	Peru (Mercosur) (2005)
Uruguay (2004)	Andean Community (Colombia, Ecuador,
Guatemala, El Salvador, Costa Rica, Honduras,	Venezuela) (Mercosur) (Note 6) (2005)
Nicaragua (2011)	Cuba (Mercosur) (2007)
Peru (2012)	Uruguay (Economic Complementation Agreement) (Note 7) (2008, 2011)
Israel (2000)	Israel (Mercosur) (2010)
EFTA (European Free Trade Association): Norway, Switzerland, Iceland,	India (Mercosur) (2009)
Liechtenstein (2001)	
EU (2000) 15 countries (Note 3)	
EU (2004) Another 10 countries (Note 4)	
EU (2007) Another 2 countries: Bulgaria & Romania	
EU (2013) Another 1 country: Croatia	
Japan (2005)	
Pacific Alliance (signed 2014, not yet in force)	

(Note 1) Venezuela withdrew in 2006.
(Note 2) Costa Rica, Nicaragua, El Salvador, Guatemala, and Honduras concluded a unified agreement in 2011. This entered into force in 2013. All of the original individual agreements have therefore expired.
(Note 3) Belgium, Denmark, Germany, Greece, Spain, France, Ireland, Italy, Luxembourg, Netherlands, Austria, Portugal, Finland, UK, Sweden
(Note 4) Czech Republic, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Slovenia, Slovakia
(Note 5) Paraguay was suspended over matters concerning the policies of its former president. The present regime is eligible to participate in meetings.
(Note 6) Venezuela withdrew from the Andean Community with a view to formal accession to Mercosur.
(Note 7) An agreement to cover the period until the Mercosur Automotive Policy enters into force.
(Mercosur) Launched as a customs union in 1995, following the 1991 signing of the Treaty of Asunción, which had as its goal the abolition of tariffs within the region. Tariffs within the region are zero, except on motor vehicles and their parts, and sugar (however, there are exemptions for certain goods in individual countries). It is difficult for Brazil to conclude FTAs in its own right, as Mercosur has set a common external tariff for around 85% of goods.
( ) indicates the year of entry into force
Source: Membership of the WTO and Other Agreements (JETRO website).

Figure II-2-3-6 Foreign direct investment in Mexico (left) and direct investment by Japan in Mexico (right)

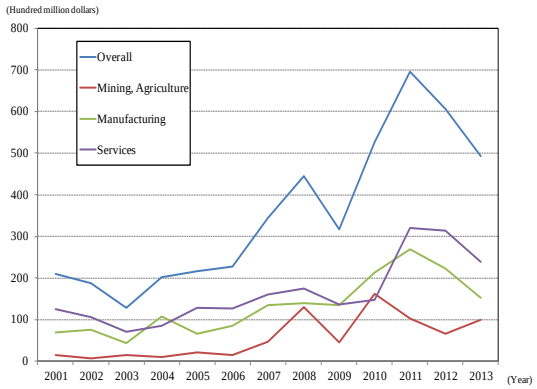


Source: INEGI (Mexican National Institute of Statistics and Geography), CEIC Database.

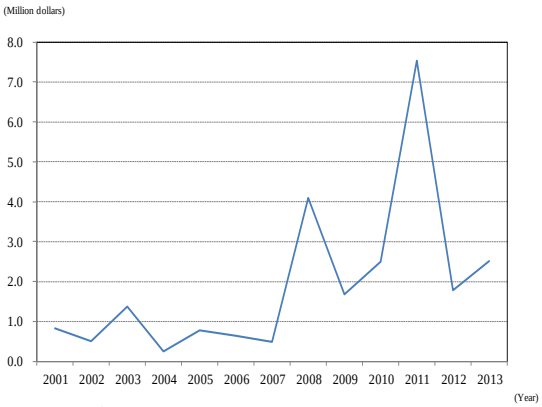


Notes: Negative figures indicate that withdrawals from Mexico exceeded investment in the country.
Source: Directorate General for Foreign Investment of Mexico's Secretariat of Economy.

Figure II-2-3-7　Foreign direct investment in Brazil (left) and direct investment by Japan in Brazil (right)

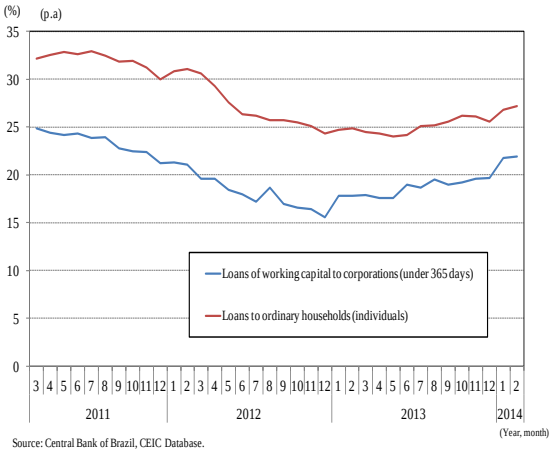


Source: Central Bank of Brazil, CEIC Database.

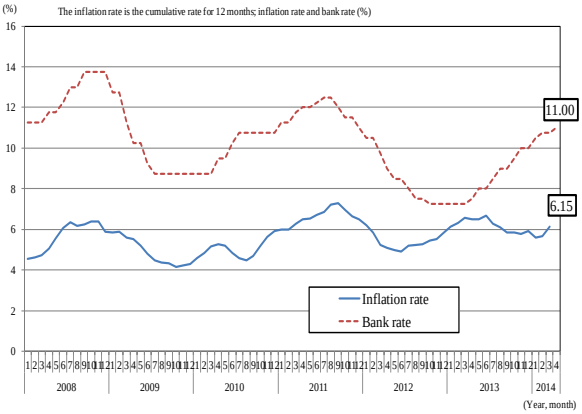


Source: Central Bank of Brazil, CEIC Database.

Figure II-2-3-8　Trends in Brazil's domestic lending rate (left) and its bank rate and inflation rate (right)

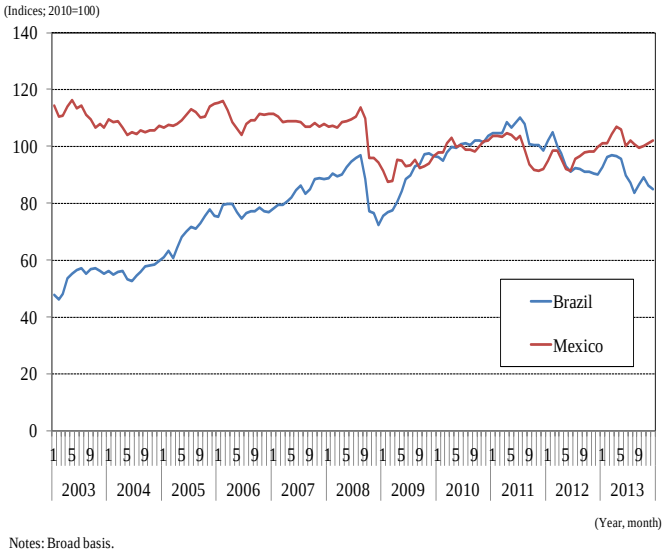


Source: Central Bank of Brazil, CEIC Database.



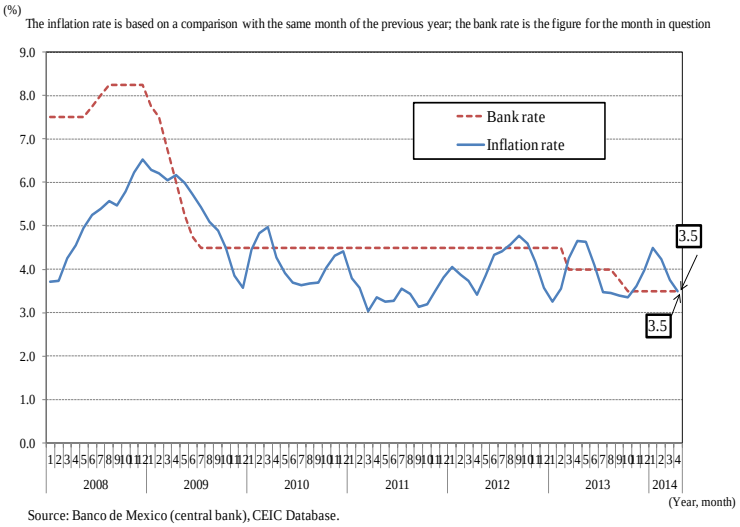
Source: Central Bank of Brazil, IBGE (Brazilian Institute of Geography and Statistics), CEIC Database.

Figure II-2-3-9　Real effective exchange rates of the Brazilian real and the Mexican peso



Notes: Broad basis.
Source: BIS (Bank for International Settlements).

Figure II-2-3-10　Trends in Mexico's bank rate and inflation rate



Source: Banco de Mexico (central bank), CEIC Database.

(2)　Fostering the domestic market

According to a survey conducted by the government of Mexico, approximately 96% of business facilities located in Mexico have a workforce of 10 employees or less. In manufacturing industries, the ratio of such business facilities reached approximately 93% and sales by such business facilities accounted for approximately 4.3% of the total sales, meaning that most business facilities are small in business scale (II-2-3-11)[217].

While Mexico has grown into a manufacturing and export base because of its cost advantage, including low-cost wages, the problem of income inequality has been pointed out. According to a breakdown of households into 10 income brackets based on a household budget survey conducted by the government of Mexico, the top 20% (Brackets IX and X) account for around 50% of the overall incomes (Table II-2-3-12). This is presumably because of the presence of many non-regular employees (workers in the informal sector[218] in particular).

According to AMAI (Association of marketing and opinion research companies in Mexico**),** approximately 53% of Mexican households regard themselves as belonging to the middle class (lower- or upper-middle class) (Figure II-2-3-13).

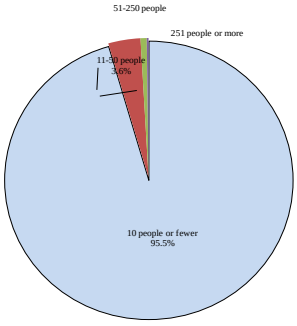
On the other hand, in Brazil, people who constitute the middle class categorized as "Class C" has increased remarkably and have come to account for more than half of the total population as a result of securing of employment (particularly regular jobs) associated with the commodity boom, a minimum wage hike and an anti-poverty program called *Bolsa Familia* (under which families can receive cash

[217] In Japan's case, business facilities with a workforce of 10 employees or less account for around78% of all business facilities. In manufacturing industries, the rate is around 69%. (Statistical data of "2012 Economic Census for Business Activity - Tabulation of Establishments - Aggregated Across Industries," Ministry of Internal Affairs and Communications and Ministry of Economy, Trade and Industry).

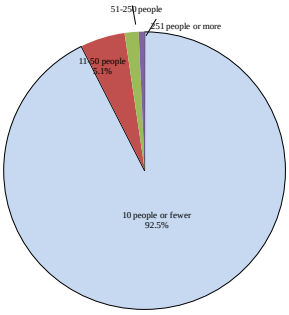
[218] Workers in the informal sector, as defined by the Mexican authorities, refer to "all activity implementators who do not have juridical personality and who are of a nature similar to a domestic industry."

benefits if they fulfill the duty of ensuring that children undergo health checks and attend school[219]). The middle class has acted as a driving force of consumption, supported by an increase in consumer credit, and Brazil has grown into a major market attracting global attention (Figures II-2-3-14, II-2-3-15 and II-2-3-16).

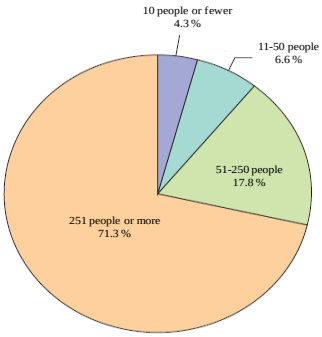
Figure II-2-3-11 Scale of businesses in all sectors and in the manufacturing sector in Mexico



Source: INEGI (Mexican National Institute of Statistics and Geography), 2008 Economic Census.



Source: INEGI (Mexican National Institute of Statistics and Geography), 2008 Economic Census.



Source: INEGI (Mexican National Institute of Statistics and Geography), 2008 Economic Census.

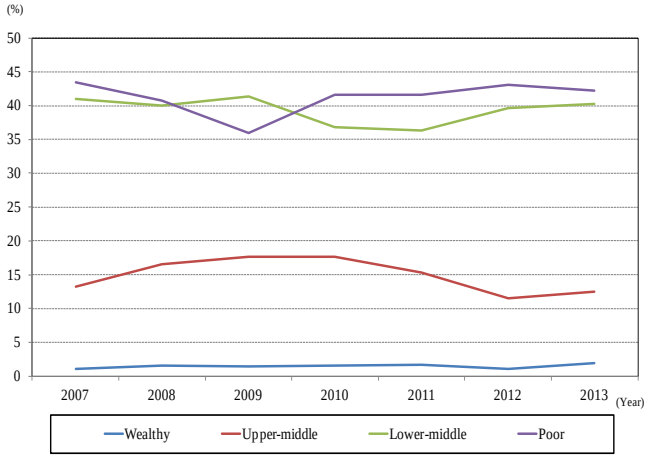
Table II-2-3-12 Family income and expenditure surveys in Mexico

Income bracket (frequency distribution)	Trends in average income (monthly) by bracket (pesos)				2012				
	2006	2008	2010	2012			Change (%)		
Sample decile	Income amount	Income amount	Income amount	Income amount	Component ratio	Cumulative component ratio	Compared with 2006	Compared with 2008	Compared with 2010
I	2,599	2,379	2,211	2,332	1.8%	100%	-10.3%	-1.9%	5.5%
II	4,502	4,153	3,891	3,931	3.1%	98.2%	-12.7%	-5.3%	1.0%
III	5,927	5,597	5,204	5,245	4.1%	94.0%	-11.5%	-6.3%	0.8%
IV	7,387	6,995	6,550	6,504	5.1%	88.9%	-11.9%	-7.0%	-0.7%
V	9,024	8,543	7,991	7,971	6.3%	82.6%	-11.7%	-6.7%	-0.2%
VI	10,870	10,500	9,686	9,621	7.6%	75.1%	-11.5%	-8.4%	-0.7%
VII	13,452	13,127	11,868	11,857	9.3%	65.7%	-11.9%	-9.7%	-0.1%
VIII	16,929	16,695	15,030	14,950	11.8%	54.0%	-11.7%	-10.5%	-0.5%
IX	23,065	23,053	20,378	20,338	16.0%	38.0%	-11.8%	-11.8%	-0.2%
X	51,095	51,842	42,438	44,334	34.9%	34.9%	-13.2%	-14.5%	4.5%
Average total income (total)	14,566	14,288	12,525	12,708			-12.8%	-11.1%	1.5%

Notes: Income brackets have been divided into equal deciles, ranked in order from the households with the lowest income to those with the highest. The component ratio is the proportion of total household income accounted for by the total income of each income bracket.
Source: INEGI (National Institute of Statistics and Geography), ENIGH (Family Income and Expenditure Survey) 2012.

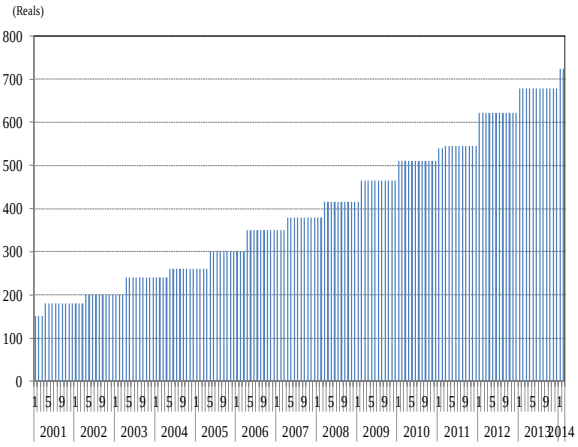
[219] This program was praised as effective in providing relief to the poor considering its expenditure size as a proportion of GDP (F.V. Soares (2011)). In 2013, Bolsa Familia was given an Award for Outstanding Achievement by the International Social Security Association, an international non-profit organization affiliated with the International Labor Organization (ILO).

Figure II-2-3-13 Awareness of income brackets

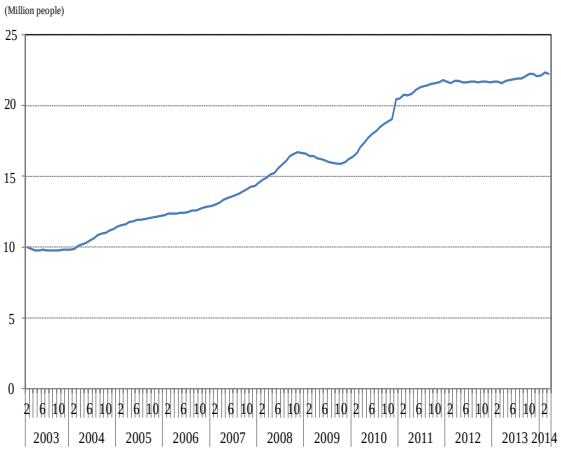


Notes: Opinion poll asking "Are you wealthy, middle-class, or poor?"
Source: AMAI (Mexican Association of Marketing Research and Public Opinion Agencies).

Figure II-2-3-14 Trends in Brazil's minimum wage (left) and number of regular employees (right)

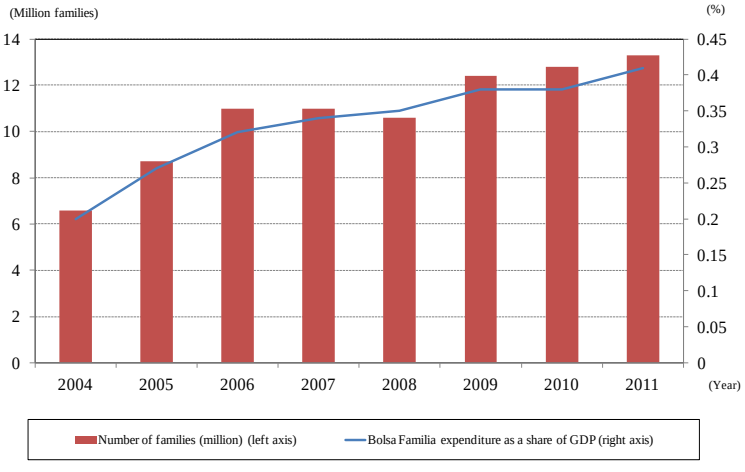


Source: Brazilian Ministry of Labor and Employment, CEIC Database.



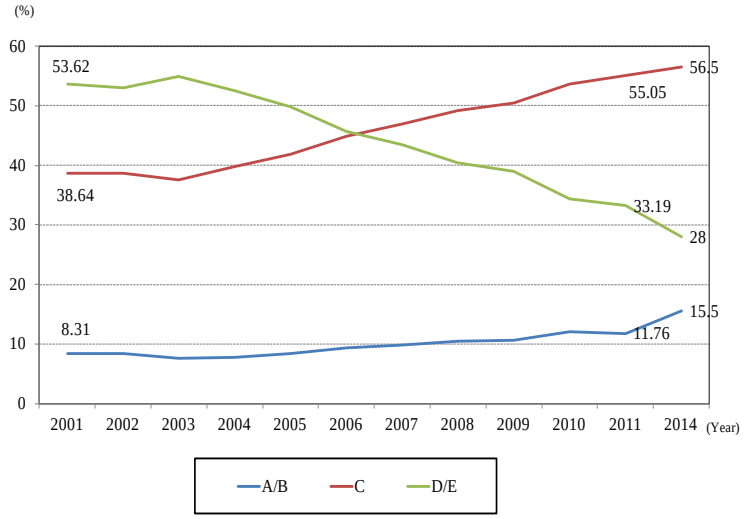
Source: Brazilian Ministry of Labor and Employment, CEIC Database.

Figure II-2-3-15 Bolsa Familia (number of families in receipt, scale of expenditure as a share of GDP)



Source: Brazilian Ministry of Social Development and Hunger Alleviation (MDS).

Figure II-2-3-16　Trends in the share of population by income bracket in Brazil



Notes: Figures for 2014 (figures at the furthest right-hand side of the graph) are estimates. The other figures are figures for 2011.
Source: *New Middle Class Prospects in Brazil* (FGV (Fundação Getulio Vargas)).

(3)　Trade structure

While Mexico has concluded FTAs with countries and regions around the world, it is closely linked with the U.S. economy, a huge consumer market, due to its proximity. Exports to the United States accounted for 79% of Mexico's overall exports in 2013. In recent years, Mexico has also been attracting attention as a gateway into Central and South American countries (Figure II-2-3-17).

For the United States, China is the largest import source country, with a share of 19%, compared with a share of 12% for Mexico (Figure II-2-3-18).

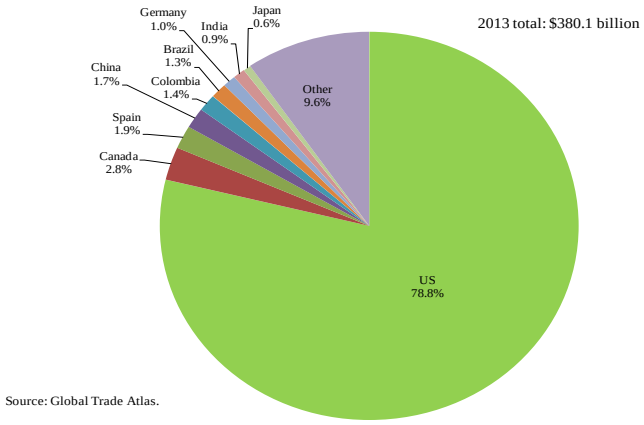
A look at the top 10 items of export to the United States from Mexico and China shows that there are five overlapping items, including the top three items for both countries (Table II-2-3-19). In recent years, Mexico has been exploring ways of diversifying export destination countries in order to mitigate its tendency to be affected by the U.S. economy (Figure II-2-3-20).

Meanwhile, amid growth in demand for primary goods in emerging economies, including China, Brazil's exports to China in particular have increased. In 2009, China became the largest export destination country for Brazil, and primary goods, such as iron ore, soybeans and crude oil have become major export items (Figure II-2-3-21)[220].

In particular, exports to China increased steeply between 2008 and 2010, and as a result, Brazil's GDP growth rate recovered rapidly. While the effects of tax reduction[221] have also contributed to the GDP growth, robust demand from China presumably acted as a driving force of the Brazilian economy. Although Brazil's export dependence as a percentage of GDP is not high, its trade structure is prone to be affected by the Chinese economy and movements in international commodity prices (Figures II-2-3-22 and II-2-3-23).

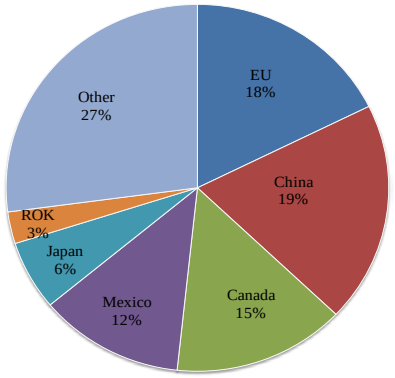
220 The EU as a whole is the largest export destination, but China is only slightly behind.
221 Reduction of the industrial product tax applicable to automobiles.

Figure II-2-3-17 Mexico's export partners



Source: Global Trade Atlas.

Figure II-2-3-18 Major sources of imports to the U.S. as of 2013



Source: Global Trade Atlas.

Figure II-2-3-19 Goods imported to the U.S. from China and Mexico

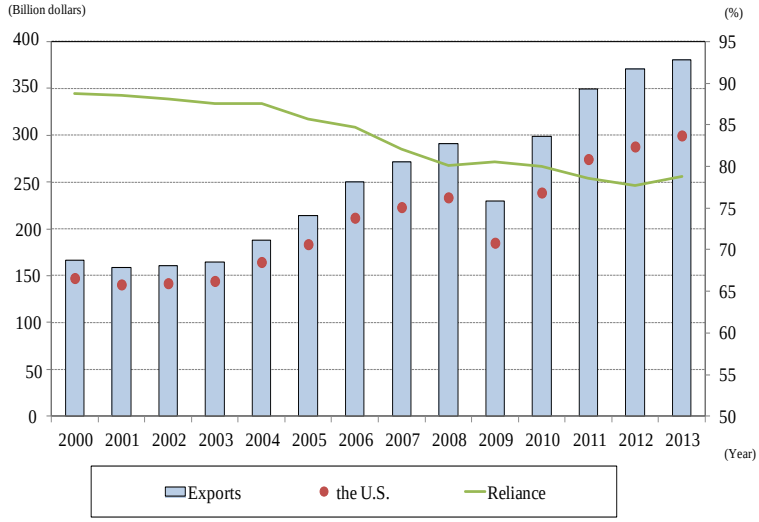
Total value of imports from China	440,434	Share (%)
Electrical machinery (HS85): Televisions, cellphones, etc.	117,532	26.7
General machinery (HS84): Computers, etc.	100,445	22.8
Furniture (HS94)	24,124	5.5
Toys (HS95)	21,678	4.9
Shoes and other footwear (HS64)	17,009	4.0
Apparel (HS61): Sweaters and other knitted goods	15,578	3.5
Apparel (HS62): Women's clothing other than knitwear	14,901	3.4
Plastics, etc. (HS39)	12,928	2.9
Transport equipment (HS87): Motor vehicles, etc.	9,813	2.2
Precision instruments (HS90)	9,523	2.2

Source: Global Trade Atlas.

Total value of imports from Mexico	280,455	Share (%)
Transport equipment (HS87): Motor vehicles, etc.	53509	21.2
Electrical machinery (HS85): Televisions, cellphones, etc.	56816	20.5
General machinery (HS84): Computers, etc.	42314	15.2
Mineral fuels (HS27): Crude oil, etc.	39823	12.4
Precision instruments (HS90): Medical equipment, etc.	10354	3.8
Furniture (HS94)	7838	3.0
Precious metals (HS71): Gold, etc.	9633	2.5
Vegetables (HS07): Tomatoes, cucumbers, etc.	5644	2.0
Plastics (HS39)	4458	1.8
Fruits (HS08)	3774	1.5

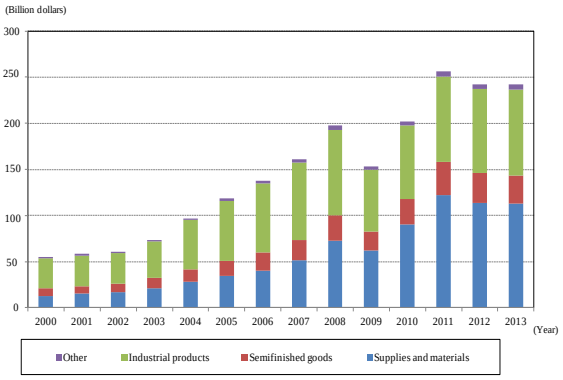
Notes: Special classification items (HS98) have been excluded from figures for imports from Mexico.

Figure II-2-3-20 Mexico's reliance on the U.S. in its exports

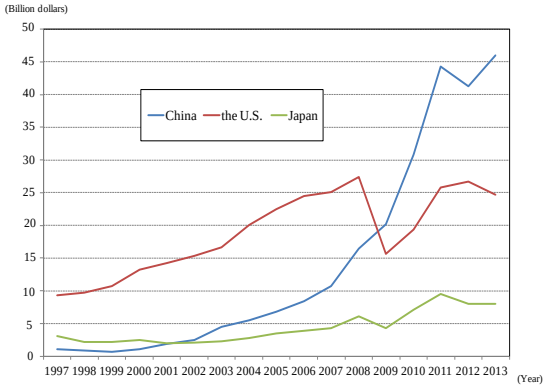


Source: Banco de Mexico (central bank), CEIC Database.

Figure II-2-3-21 Trends in Brazil's export goods and destinations thereof

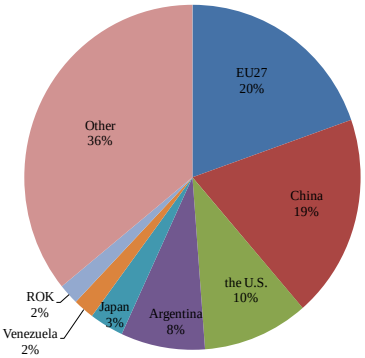


Source: Brazilian Ministry of Development, Industry, and Trade.

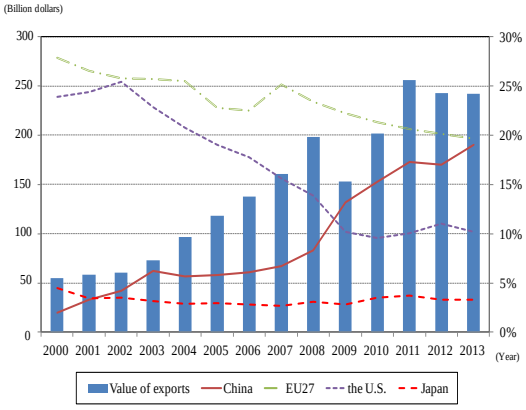


Source: Global Trade Atlas.

Figure II-2-3-22 Brazil's export partners (2013) and trends therein

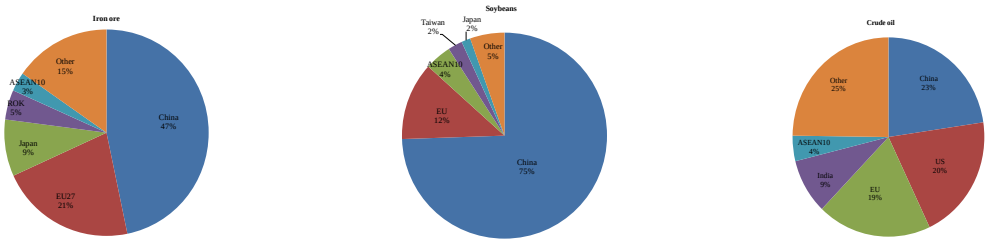


Source: Global Trade Atlas.



Source: Global Trade Atlas.

Figure II-2-3-23 Destinations for Brazilian exports of iron ore, soybeans, and crude oil (2013)



Source: Global Trade Atlas.

(4) Future challenges

Both Mexico and Brazil promoted reforms following economic crises. Mexico promoted structural reforms such as trade liberalization and privatization after experiencing a debt crisis in 1982 and a currency crisis in 1994 and actively implemented a policy of opening up by making the most of its proximity to the United States as an advantage, thereby growing into a manufacturing and export base. On the other hand, while Brazil actively accepted inward foreign direct investments, it grew its domestic market by fostering domestic industries and expanding the middle class. In addition, in recent years, Brazil has continued to achieve development while maintaining a trade surplus through resource exports. While both countries have pursued their respective growth strategies, they face many challenges.

Mexico's challenges include income inequality and structural reform of the energy sector. In this respect, expectations are growing for President Enrique Pena Nieto's structural reform efforts, and the efforts so far made have been appreciated by the market to a certain degree (Table II-2-3-24).

While the savings rates in Central and South American countries are generally said to be low compared with the rates in Asian emerging economies, the rate in Brazil is particularly low. Brazil needs to improve its underdeveloped infrastructure, which is an element of the "Brazil cost," by increasing the savings rate and promoting investments and also curbing inflation (Table II-2-3-25).

Brazil has become prone to be affected by changes in the external financial environment, as it has continued to record a current account deficit due to an increase in imports caused by the growth of the domestic market. A U.S. credit rating agency downgraded Brazil's foreign-currency and long-term sovereign debt rating, so attention needs to be paid to whether the country can maintain fiscal discipline (Figure II-2-3-26).

In addition, the household debt ratio has been rising in Brazil in recent years, while the growth in the balance of loans provided by private banks has remained stagnant (Figure II-2-3-27). The level of debts owed by the middle class is higher than the average for major Central and South American countries (Argentina, Brazil, Chile, Colombia, Peru and Mexico), and it has been pointed out that there has been no progress in capital formation by the private sector[222]. In Brazil, the domestic market has

[222] Ferreia, Francisco H G., Julian Messina, Jamale Rigolini, Luis-Felipe Lōpez-Calva, Maria Ana Lugo and Renos Vakis (2013), *Economic Mobility and The Rise of The Latin American Middle Class,* World Bank

grown considerably in recent years due to a strong consumption appetite in an emerging middle class. For example, Brazil overtook Germany and became global No. 4 in terms of domestic automobile sales. Brazil was able to pursue a policy of limited opening up compared with Mexico presumably because of its huge domestic market and abundant reserves of various resources. Attention needs to be paid to how Brazil will secure the sustainability of a domestic demand-led economy driven by domestic consumption, including how it will handle external economic relationships.

Table II-2-3-24 Ratings of foreign currency denominated government bonds issued by Mexico and Brazil

	Brazil	Outlook	Mexico	Outlook
S&P	BBB－	Stable	BBB＋	Positive
Moody's	Baa2	Positive	A3	Stable
Fitch	BBB	Stable	BBB+	Stable

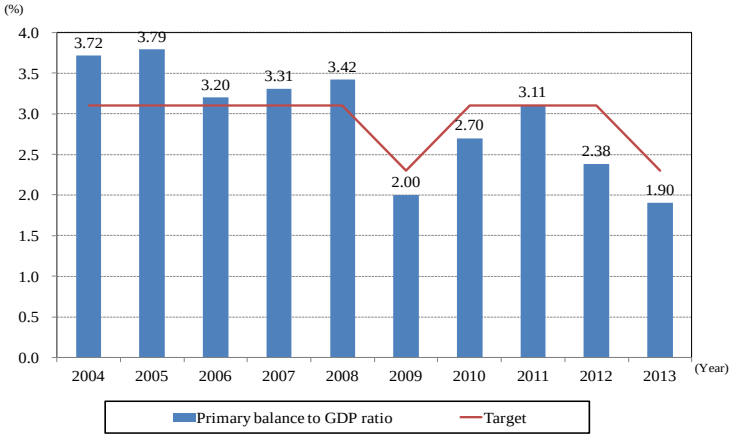
As of Tuesday, March 25, 2014

Table II-2-3-25 Domestic Total savings rate (comparison with emerging economies in Asia)

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Brazil	17.8	18.0	18.4	19.0	16.3	18.0	17.6	15.1	14.7
Chile	23.5	25.3	24.7	22.3	22.4	24.1	22.5	21.6	20.5
Colombia	18.9	20.5	20.1	20.7	20.4	19.1	20.9	20.4	20.9
Mexico	21.3	22.7	22.0	22.6	22.0	21.7	21.2	22.0	20.4
India	33.5	34.7	36.8	32.0	33.7	33.8	31.4	30.0	32.7
Indonesia	25.6	28.0	26.5	27.8	33.0	33.0	33.1	32.0	30.4
Thailand	27.1	29.4	32.8	29.9	29.5	29.1	27.8	29.3	28.5
Malaysia	36.8	38.8	38.8	38.5	33.4	34.2	34.9	31.9	30.1

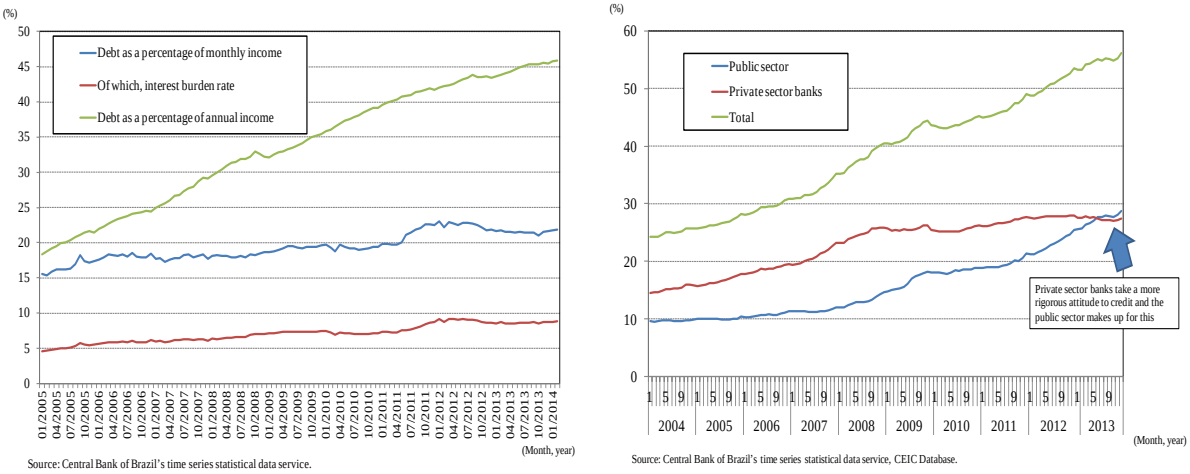
Unit (%)
Source: *WEO, April 2014* (IMF).

Figure II-2-3-26 Trends in Brazil's primary balance to GDP ratio and targets for this



Notes: Figures are actual values. (Primary balance to GDP ratio)
Source: OECD, Central Bank of Brazil.

Figure II-2-3-27 Trends in Brazil's household debt burden (left) and in its bank lending balance as a share of GDP (right)



Source: Central Bank of Brazil's time series statistical data service.
Source: Central Bank of Brazil's time series statistical data service, CEIC Database.

Column 11 Resource-producing countries' economic structures and initiatives to reduce dependence on resources — Russia and Australia

Generally speaking, resource producing countries are said to be vulnerable in that they are prone to be affected by movements of prices of primary goods. However, although both Russia and Australia are resource producing countries, they were affected in different ways by the deterioration of the global economic conditions after the collapse of Lehman Brothers. In this column, we examine these two countries' dependence on resources and their differences and describe their initiatives to reduce their dependence on resources.

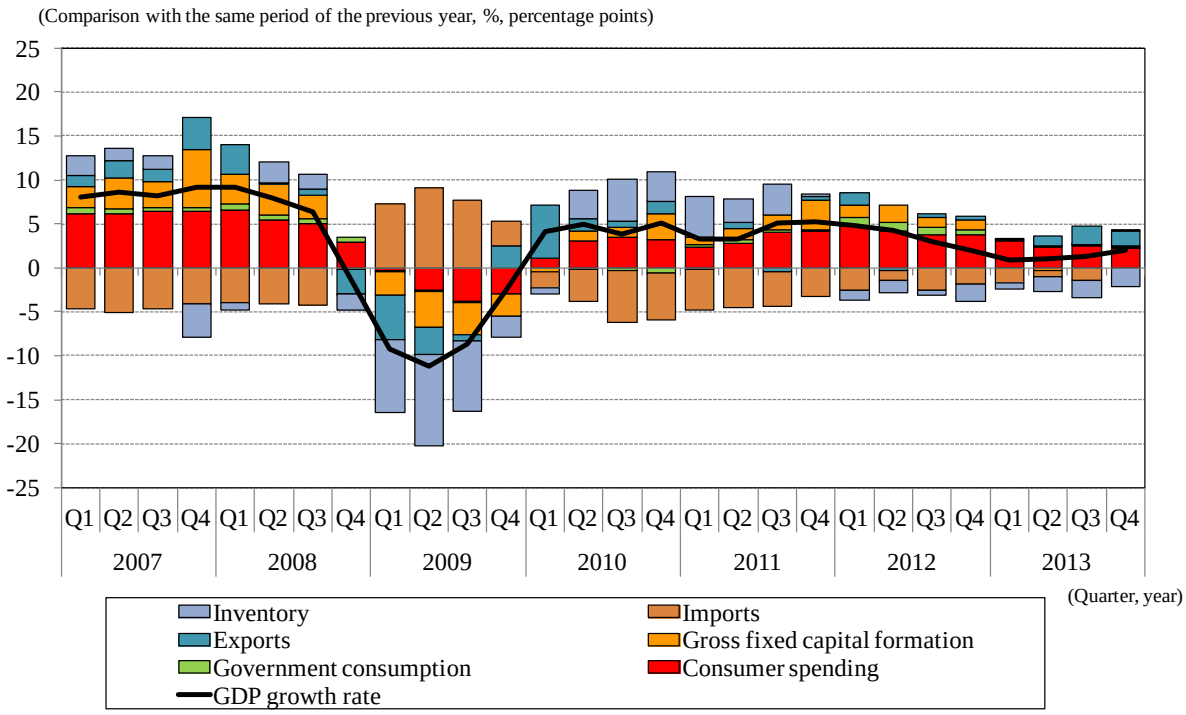
(1) Russia

(A) Dependence on resources

A breakdown of Russia's real GDP growth by demand component shows that personal consumption supported its high growth before the collapse of Lehman Brothers. However,

immediately after the collapse of Lehman Brothers, all of personal consumption, fixed capital formation, exports and inventories recorded negative growth, and in the second quarter of 2009, real GDP posted a steep contraction of 10%. Subsequently, real GDP returned to positive growth in the first quarter of 2010, and the real GDP growth rate has mostly stayed at around 4% since then, with personal consumption and exports contributing to the continuous positive growth. In particular, among factors behind an increase in exports is presumably a rise in the price of crude oil (WTI) (Column Figure 11-1).

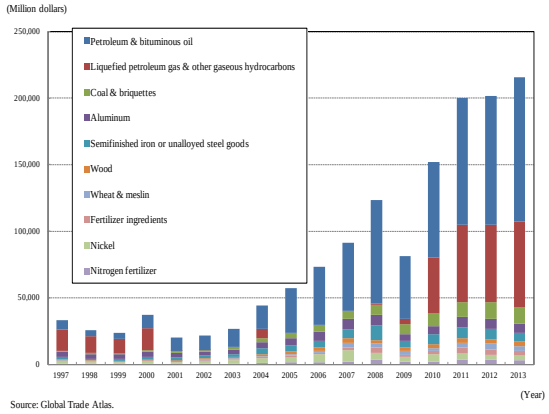
Figure Column 11-1　Russia's real GDP growth rate (broken down by degree of contribution)



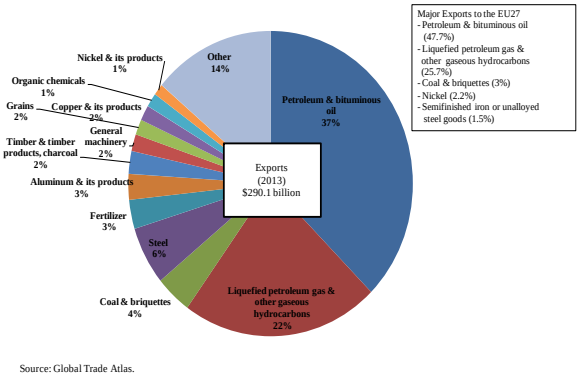
Notes: Real values with 2008 as the base year.
Source: Federal State Statistics Service, CEIC Database.

By item, mineral fuels such as petroleum, petroleum gas and coal accounted for around 60% (worth 186.2 billion dollars) of Russia's overall exports in 2013, reflecting the country's heavy dependence on resources for export. Meanwhile, industrial products, such as general machinery, automobiles and electrical machinery accounted for around 40% (worth 125.6 billion dollars) of overall imports (Column Figures 11-2 and 11-3).

Figure Column 11-2 Russia's exports

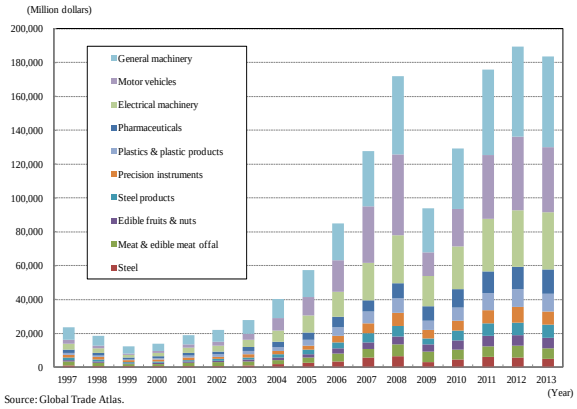


Source: Global Trade Atlas.

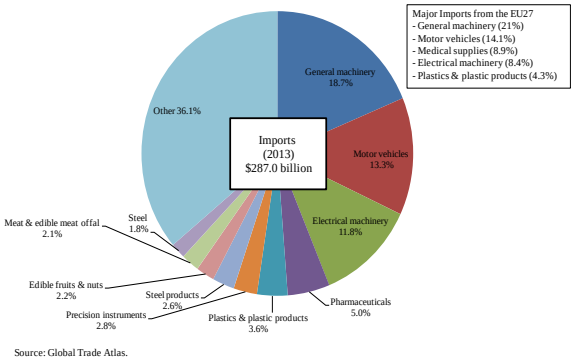


Source: Global Trade Atlas.

Figure Column 11-3 Russia's imports



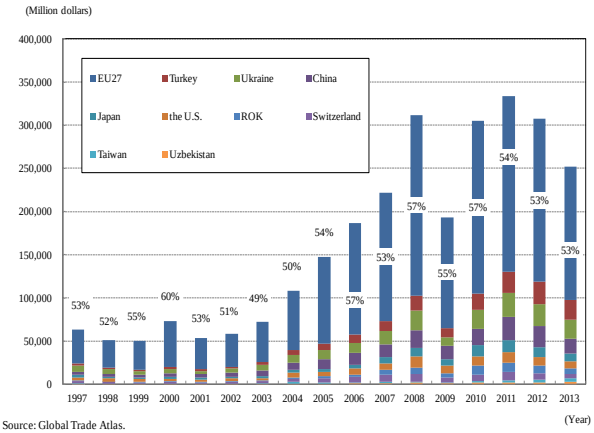
Source: Global Trade Atlas.



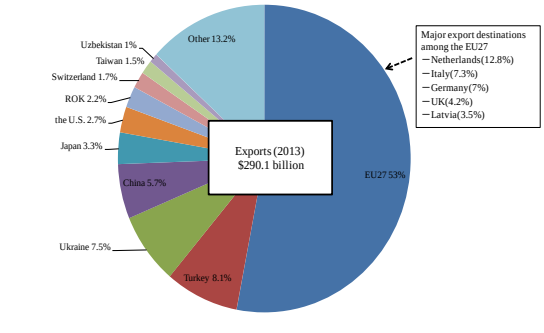
Source: Global Trade Atlas.

As for trading partners' shares, Europe's shares of Russia's exports and imports have mostly stayed at around 50% and 40%, respectively. Russia's trading partners are mostly European countries, although it does not depend heavily on specific countries within Europe. This indicates that Russia's trade is prone to be affected by the European economic conditions (Column Figures 11-4 and 11-5).

Figure Column 11-4 Russia's export partners

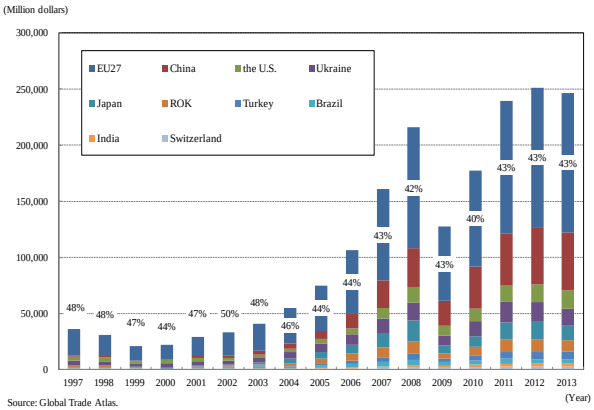


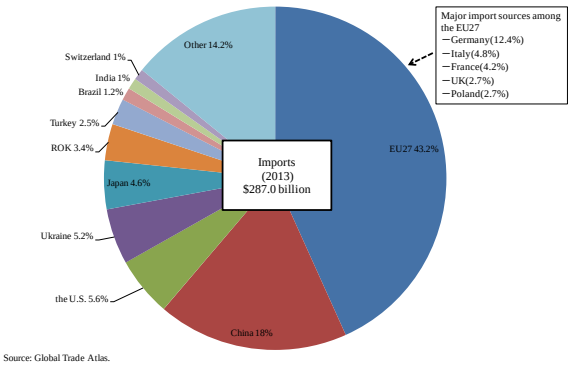
Source: Global Trade Atlas.



Source: Global Trade Atlas.

Figure Column 11-5　Russia's import sources





Next, we look at how oil price movements affect the Russian economy. A breakdown of Russia's national budget shows that oil and natural gas account for around 50% of its revenue. The ratio of resource-related revenue to overall revenue is particularly high in Russia compared with in other primary goods exporting countries (Column Table 11-6).

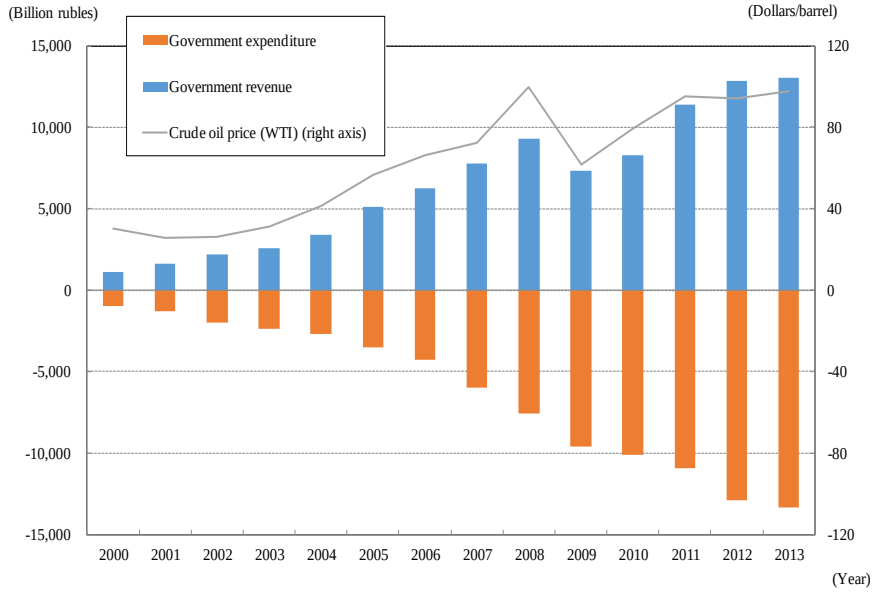
Table Column 11-6　Breakdown of Russia's national budget (revenue) (January – December 2013)

	Russia				Malaysia	Indonesia	Mexico
	2012 (Jan-Dec)		2013 (Jan-Dec)		2011-2013		
	Budget (Billion rubles)	Share (%)	Budget (Billion rubles)	Share (%)	Share (%)		
Petroleum & natural gas-related	6453.2	50.2%	6534	50.2%	18.0%	21.7%	33.3%
Revenue	12853.7		13019.9				

Notes: Figures for Malaysia, Indonesia, and Mexico are a moving average for the previous three years. Figure for Indonesia is a moving average for the previous three years in 2010-2012.
Source: Economic Expert Group (http://www.eeg.ru/pages/148).

Russia's fiscal revenue has increased in tandem with a rise in the price of crude oil (WTI), indicating that Russia's fiscal position is prone to be affected by crude oil price movements (Column Figure 11-7).

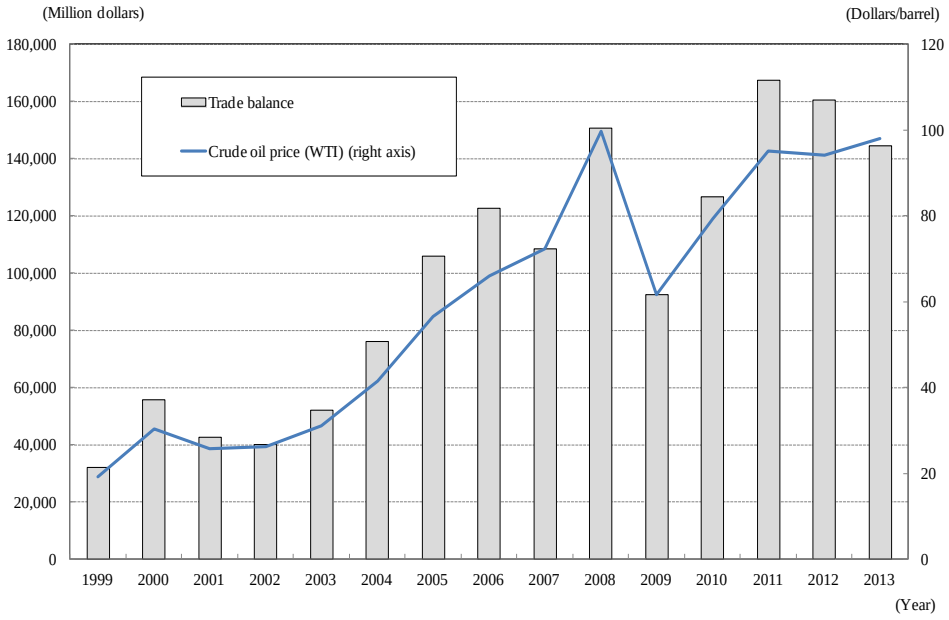
Figure Column 11-7　Crude oil price (WTI) and Russia's fiscal balance



Source: Ministry of Finance of the Russian Federation, CEIC Database.

In Russia, where resources account for around 60% of overall exports, the rise in the crude oil price has acted as a driving force of the economic growth by expanding the trade and current account surpluses and domestic demand. Although the crude oil price surpassed 100 dollars per barrel in 2008, it plunged in 2009 following the collapse of Lehman Brothers, resulting in the shrinkage of Russia's trade surplus. Subsequently, the crude oil price recovered to the level reached immediately before the collapse of Lehman Brothers (Column Figure 11-8).

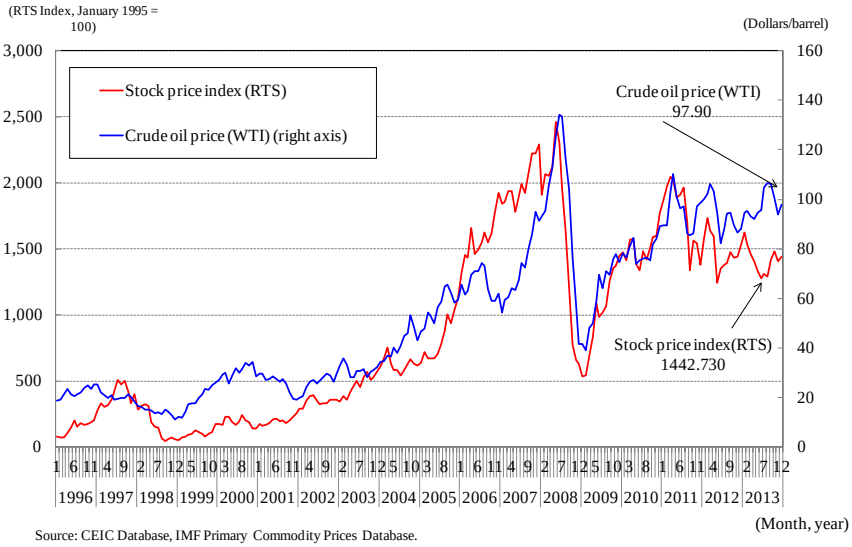
Figure Column 11-8　Crude oil price (WTI) and Russia's trade balance



Source: IMF, CEIC Database.

Crude oil price movements have had significant effects on stock price indexes as well. When the crude oil price fell steeply after the collapse of Lehman Brothers, Russian stock prices dropped in tandem. Once the crude oil price moved upwards, Russian stock prices also recovered (Column Figure 11-9).

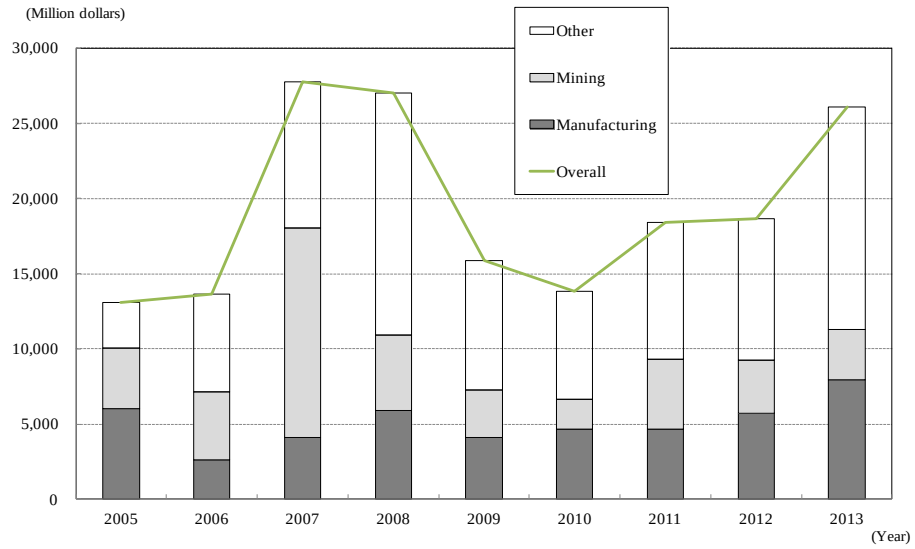
Figure Column 11-9　Trends in crude oil price (WTI) and Russia's stock price index



Source: CEIC Database, IMF Primary Commodity Prices Database.

As for foreign direct investments in Russian industries, around half of such investments are made in manufacturing and mining industries. Although investments in manufacturing industries temporarily declined in 2009, they have been on an uptrend since then (Column Figure 11-10).

Figure Column 11-10 Trends in inward investment in Russia's manufacturing industry (flow and stock)



Source: Federal State Statistics Service.

(B) Government initiatives

The government of Russia has set the goal of increasing the ratio of total investments to GDP to 25% or higher in 2015 and to 27% or higher in 2018 by promoting investments from both within and outside of the country. It has also set the goal of raising labor productivity by 50% by 2018 compared with 2011 and creating 25 million jobs by 2020[223]. The government is presumably aiming to create an economic system that does not depend on resource price movements.

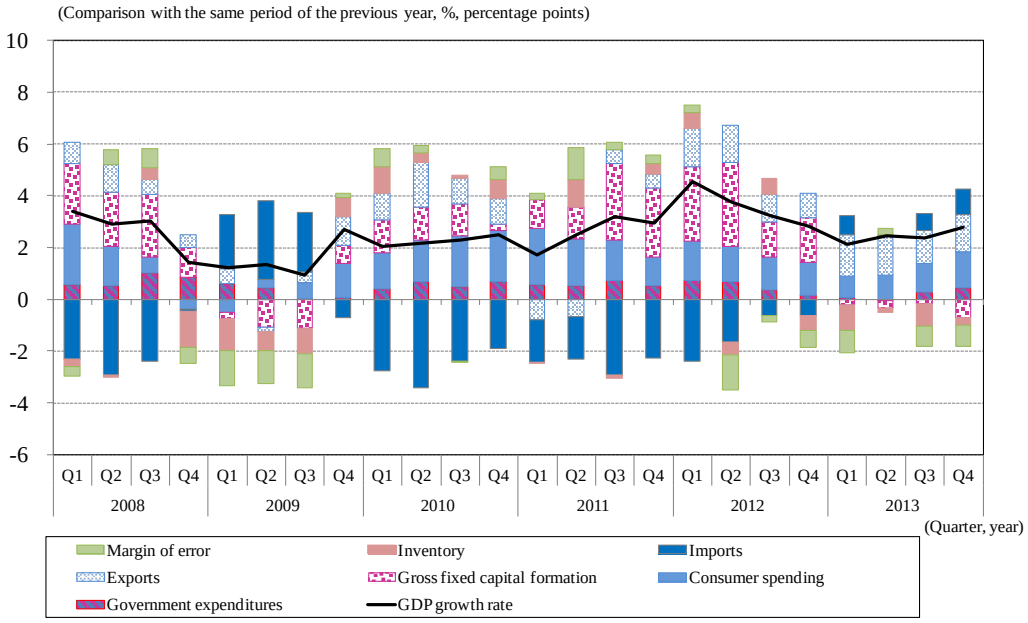
(2) Australia

(A) Dependence on resources

A breakdown of Australia's real GDP growth by demand component shows that in 2013, fixed capital formation, which had until then made significant positive contributions to real GDP growth, made negative contributions, while increases in personal consumption and exports contributed to the real GDP growth (Column Figure 11-11).

[223] These goals were set forth by President Vladimir Putin in a presidential directive dated May 7, 2012 concerning a long-term economic plan.

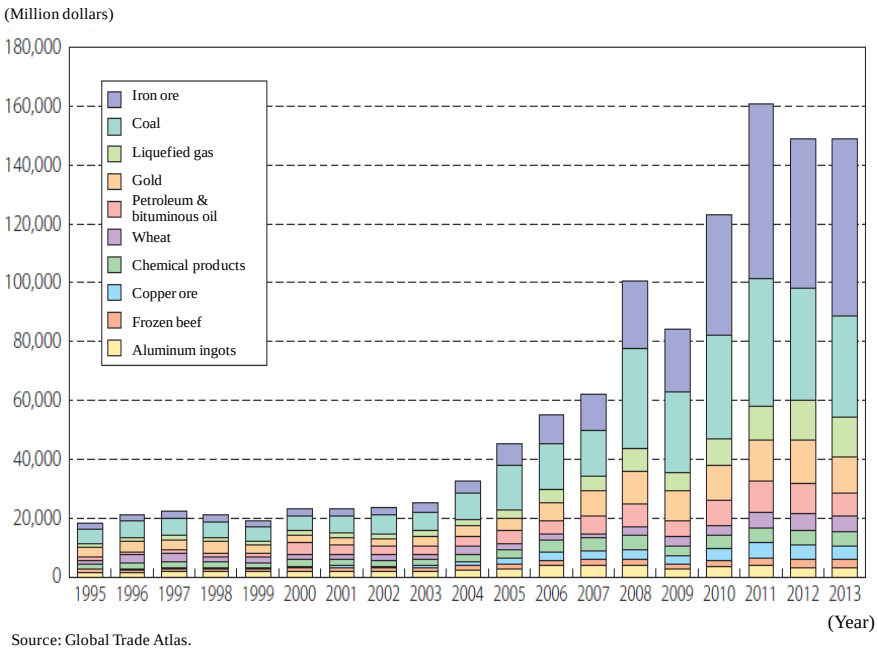
Figure Column 11-11 Australia's real GDP growth rate (broken down by degree of contribution)



Source: Australian Bureau of Statistics, CEIC Database.

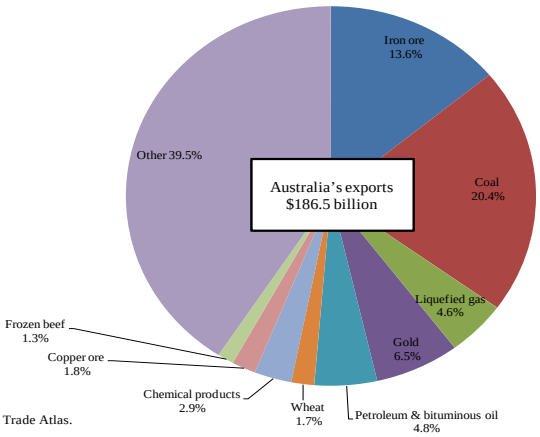
If we look at a time-sequential trend of Australian exports by item, we see that exports of resources such as iron ore and coal have been growing since 2008. In 2008, coal (20.4%) and iron ore (13.6%) together accounted for around 30% of Australia's overall exports, and in 2013, the share of resources, including iron ore (26.5%) and coal (15.2%) has expanded, reflecting the country's increasing dependence of resources for export (Column Figures 11-12, 11-13 and 11-14).

Figure Column 11-12 Trends in the composition of Australia's exports by item



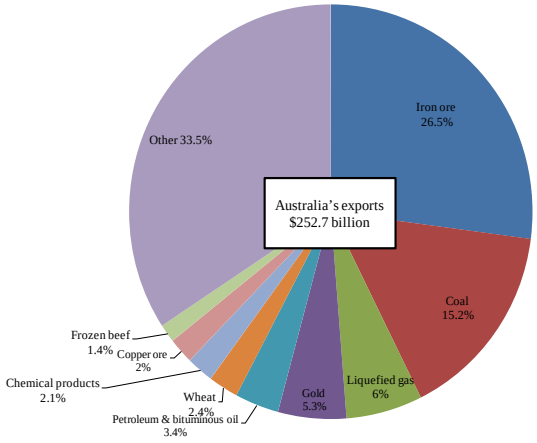
Source: Global Trade Atlas.

Figure Column 11-13　Composition of Australia's exports by item 2008



Source: Global Trade Atlas.

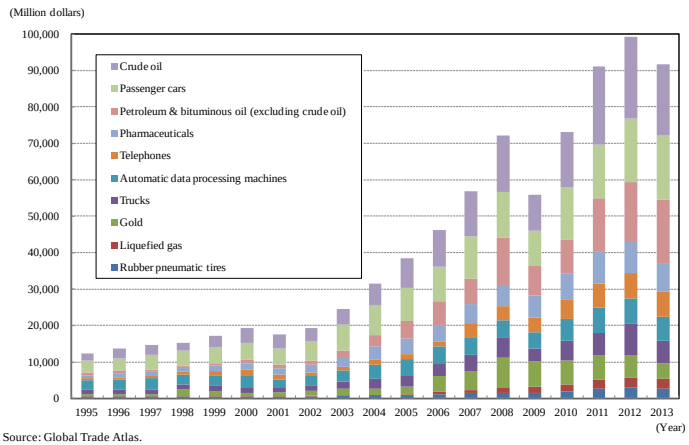
Figure Column 11-14　Composition of Australia's exports by item 2013



Source: Global Trade Atlas.

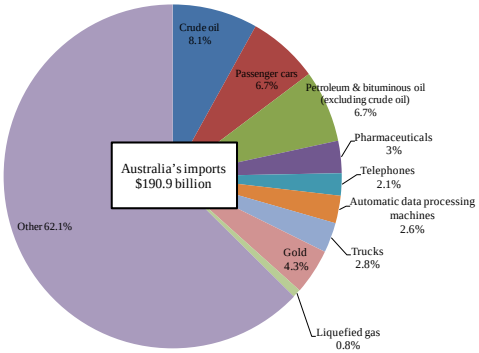
Regarding import items, crude oil, passenger cars, petroleum and bituminous oil have continued to together account for about 20% of overall imports, with no significant change observed in these individual items' shares (Column Figures 11-15, 11-16 and 11-17).

Figure Column 11-15　Trends in the composition of Australia's imports by item



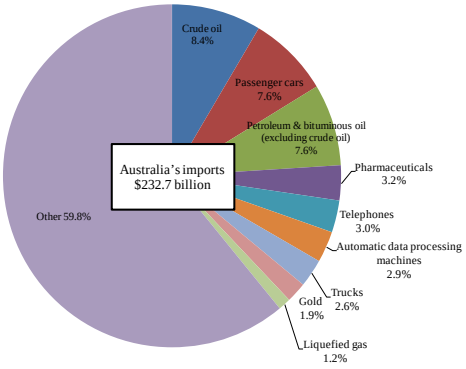
Source: Global Trade Atlas.

Figure Column 11-16　Composition of Australia's imports by item 2008



Source: Global Trade Atlas.

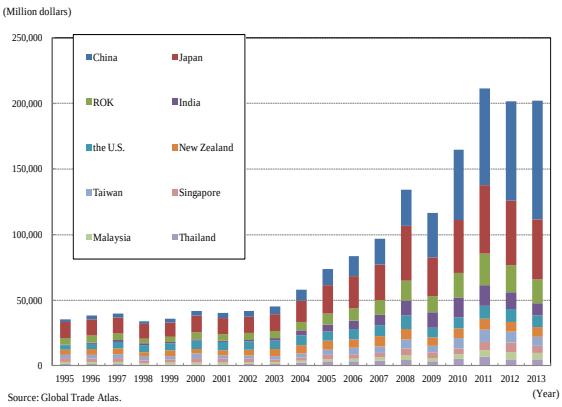
Figure Column 11-17　Composition of Australia's imports by item 2013



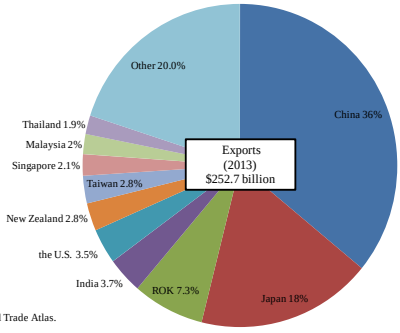
Source: Global Trade Atlas.

What is notable about the trend in Australia's trade is that resources' growing share of the country's exports is attributable to an increase in exports to China in particular. In 2013, China (share of 36%) was the top export destination country for Australia, followed by Japan (18%) and ROK (7.3%), meaning that Northeast Asia had a share of about 60% of Australia's overall exports. China also had a large share as an import source country for Australia (Column Figures 11-18 and 11-19).

Figure Column 11-18　Australia's export partners

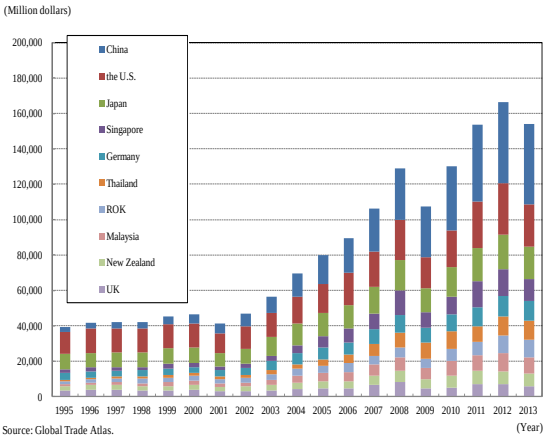


Source: Global Trade Atlas.

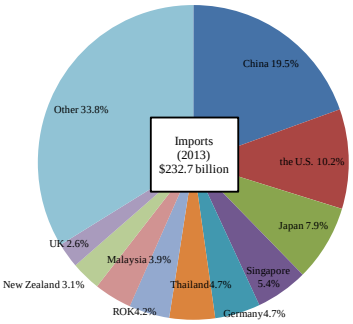


Source: Global Trade Atlas.

Figure Column 11-19　Australia's import partners



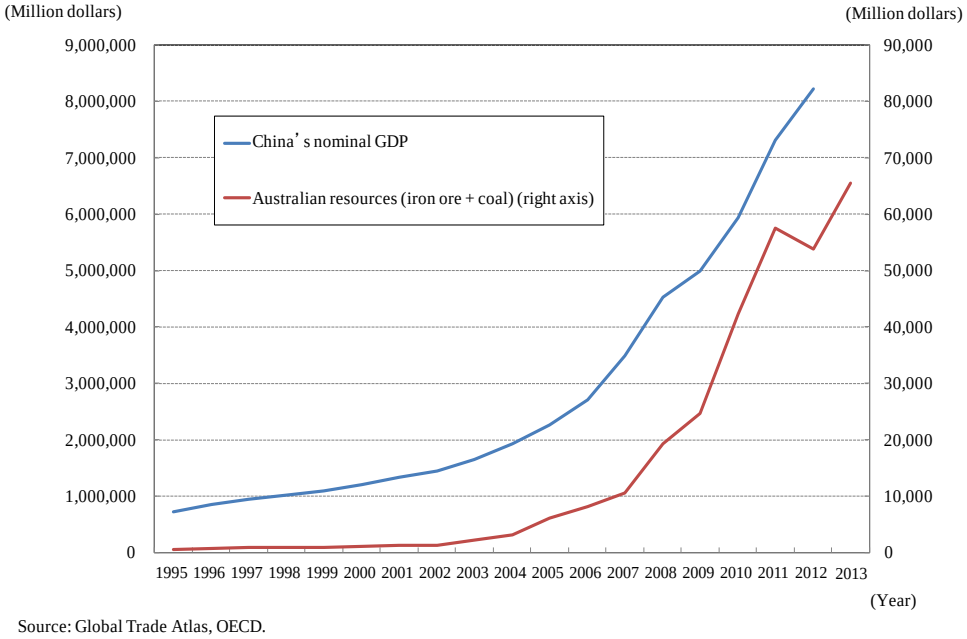
Source: Global Trade Atlas.



Source: Global Trade Atlas.

Looking at the relationship between China's nominal GDP and changes in the value of Australia's resource exports (iron ore and coal), the resource export value rose almost in tandem with China's nominal GDP growth throughout the 2000s. Although the trend changed in 2012, it indicates that throughout the 2000s, China's GDP growth led to an increase in China's imports, which in turn resulted in an increase in Australia's resource exports. As China's growth rate is slowing down, Australia's exports are unlikely to grow significantly in the future (Column Figure 11-20).

Figure Column 11-20　Comparison of China's nominal GDP and the value of Australia's resource (iron ore, coal) exports



Source: Global Trade Atlas, OECD.

(B) Government initiative

The government of Australia has indicated a policy of promoting economic partnerships with East Asian countries[224]. As this initiative contributes to the promotion of exports of Australian products, including not only resources but also agricultural products, it is expected to lead to a decline in the effects of changes in resources demand on the Australian economy.

[224] Australian Government (2012), "Australia in the Asian Century" White paper 2012 October