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Economic Impacts of Trade Liberalization – A Global perspective

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Abstract

A successful outcome in the Doha Round of multilateral trade negotiations under the auspices of the World Trade Organisation (WTO) would stimulate the growth of new markets created by evolving consumption patterns internationally, particularly in rapidly growing developing countries. For many of these countries, accelerating consumer demand for agricultural products will be met through international trade because the resources required to produce goods domestically are not always located in areas where markets are expanding, and where consumption is growing at a faster pace than domestic production.

In China and India, the world's most populous countries, rates of economic growth in 2006 were 11 per cent and 8 per cent respectively. By 2020, GDP growth rates are predicted to be around 5 per cent in China and 6 per cent in India. One recent trend that deserves emphasis is the robust economic performance of prominent South East Asian countries: the resurgence of Indonesia, Malaysia, the Philippines and Thailand, and the emergence of Viet Nam, as they integrate into the world economy.

The potential benefits of freer agricultural trade motivated WTO member countries to initiate the Doha Round of trade negotiations and to revise and expand the trade rules that were established in the Uruguay Round. It is important that the Doha Round outcome offers the prospect for greatly expanded trade, and opportunities for ASEAN agriculture industries to position them to benefit from major changes in the world economy in coming decades.

It is essential that the major players in the multilateral trade negotiations move to break the current impasse, and return to the negotiating table with improved offers. The European Union and developing countries have to accept high cuts to agricultural tariffs, and the United States needs to do more by way of both increased cuts and meaningful disciplines on agricultural subsidies.

Genuine policy reform improves the allocations of resources, spurs enterprises toward their competitive advantage, and strengthens incentives to respond to market signals and take steps that generate benefits associated with improved industry competitiveness. Managing the transitional adjustment pressures from policy reform is an important issue for many countries, most notably in developing countries that have had limited experience in dealing with the domestic consequences of policy reform; partly because of inadequate governance, infrastructure and institutions. However, it is the case that open economies grow faster and are more dynamic.

Additional benefits are likely to flow from liberalising barriers to trade in other merchandise products, typically manufactured goods. Non-agricultural market access liberalisation has an important role in partially offsetting losses borne in regions dependent on low international food prices or preferential access to agricultural markets. Agricultural trade liberalisation, in conjunction

with non-agricultural market access liberalisation, would offer significant scope for many rural workers in developing countries to take up employment opportunities in labour intensive manufacturing activities.

ABARE's global trade and environment model (GTEM) has been used to analyse an illustrative trade reform scenario. GTEM is a dynamic computable general equilibrium model of the world economy and is based on the GTAP version 6 database (Global Trade Analysis Project model). It captures intersectoral effects and links regions through trade and investment, making it a suitable tool to analyse the effects of trade reform. The GTEM simulation results are expressed, unless otherwise stated, as deviations from the corresponding levels in the 'reference case', where current policies are maintained. In the illustrative trade reform scenario, a 50 per cent multilateral reduction in bound tariffs on all imported merchandise by all countries is assumed.

Key Messages

- Global merchandise trade liberalisation would be expected to generate substantial benefits for the international community.

- Global merchandise trade liberalisation in the illustrative case would increase real Gross National Product (GNP) in the ASEAN region by more than US$9 billion dollars in 2020, relative to what would otherwise be the case (the 'reference case'). Australia and New Zealand together would gain a GNP increase of US$2.5 billion dollars in 2020.

- Global merchandise trade liberalisation would boost ASEAN agricultural exports by an estimated US$7.5 billion (in 2006 dollars) in 2020, whereas the increase in Australia's agricultural exports is estimated to be US$5.2 billion dollars in 2020, relative to the reference case. It is evident that China and India would also have a large gain from trade liberalisation within the region, with their agricultural exports increasing by an estimated US$10 billion dollars in 2020. There would also be considerable global benefits, with world agricultural exports estimated to expand by more than US$115 billion in 2020, relative to the reference case.

- Global agricultural outputs would rise as well. However, agricultural output in the EU25 and Japan are likely to decline, because of comparative disadvantage in their agricultural production. At the same time, agricultural resources are likely to be reallocated toward more efficient industries within the European Union and Japan.

- ASEAN countries as a group would see a large agricultural export opportunities for foods, fruits and vegetables, other crops, and vegetable oils and fat industries. Global merchandise trade liberalisation would benefit ASEAN's non-agricultural industries significantly as well. Australian exports of dairy, beef, sugar and wheat are also likely to increase.

- The estimated gains from a 50 per cent reduction in bound tariffs would be less than half of the estimated gains under a full global trade liberalisation scenario, due mainly to the new lower 'bound' tariffs still exceeding the currently 'applied' tariffs in some countries and some products.

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Economic impacts of trade liberalization
A Global Perspective

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ABARE profile

- **Staff** **160**
- **Location** **Canberra**
- **Funding** **Federal Government, R&D corporations & private sector**
- **ABARE research themes**
  - Agriculture
  - Trade liberalisation & the WTO
    - Provide advice to Australian trade negotiators
  - Minerals and energy
  - Natural resources

ABARE's recent research on trade-related issues

- Recently completed
  - Korean agriculture
  - Indonesian agriculture
  - Global trade liberalization
  - Agriculture in Japan
  - Agriculture in China : developments and significance for Australia

ABARE's recent research on trade-related issues

- Currently in progress
  - China agriculture and the WTO
  - India project
  - Agriculture in Malaysia
  - China modeling capacity building project
  - Viet Nam project

Objective

- World trade and current status of WTO negotiations
- Economic impacts of trade liberalization
  - an illustrative example
- Conclusion

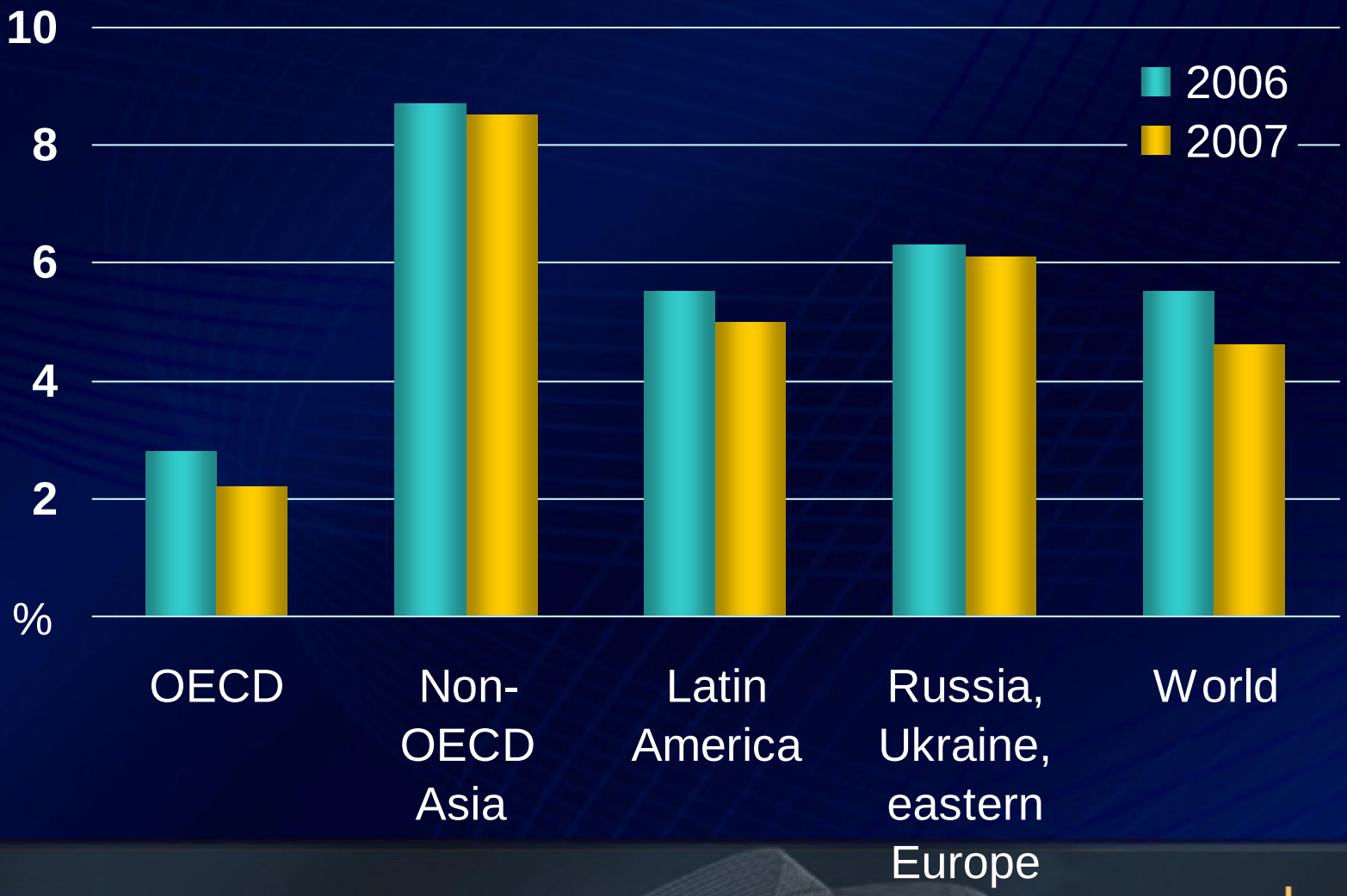
Current status of WTO negotiations

- Suspension of the Doha Round of multilateral trade negotiations since July 2006.
- Focused on a process of intensive bilateral talks
- Major players need to break the impasse, and
- Return to negotiating table with improved offers
  - more cuts and disciplines on US domestic support
  - deeper cuts to agricultural tariffs in:
    - European Union, G20, G10 and G33

Three pillars of agricultural support

- Market access
  - tariffs, quota, regulations, prohibitions
- Domestic support
  - direct payments, input subsidies, subsidised services
- Export subsidies
  - direct subsidies, food aid, concessional export credit

Regional economic growth



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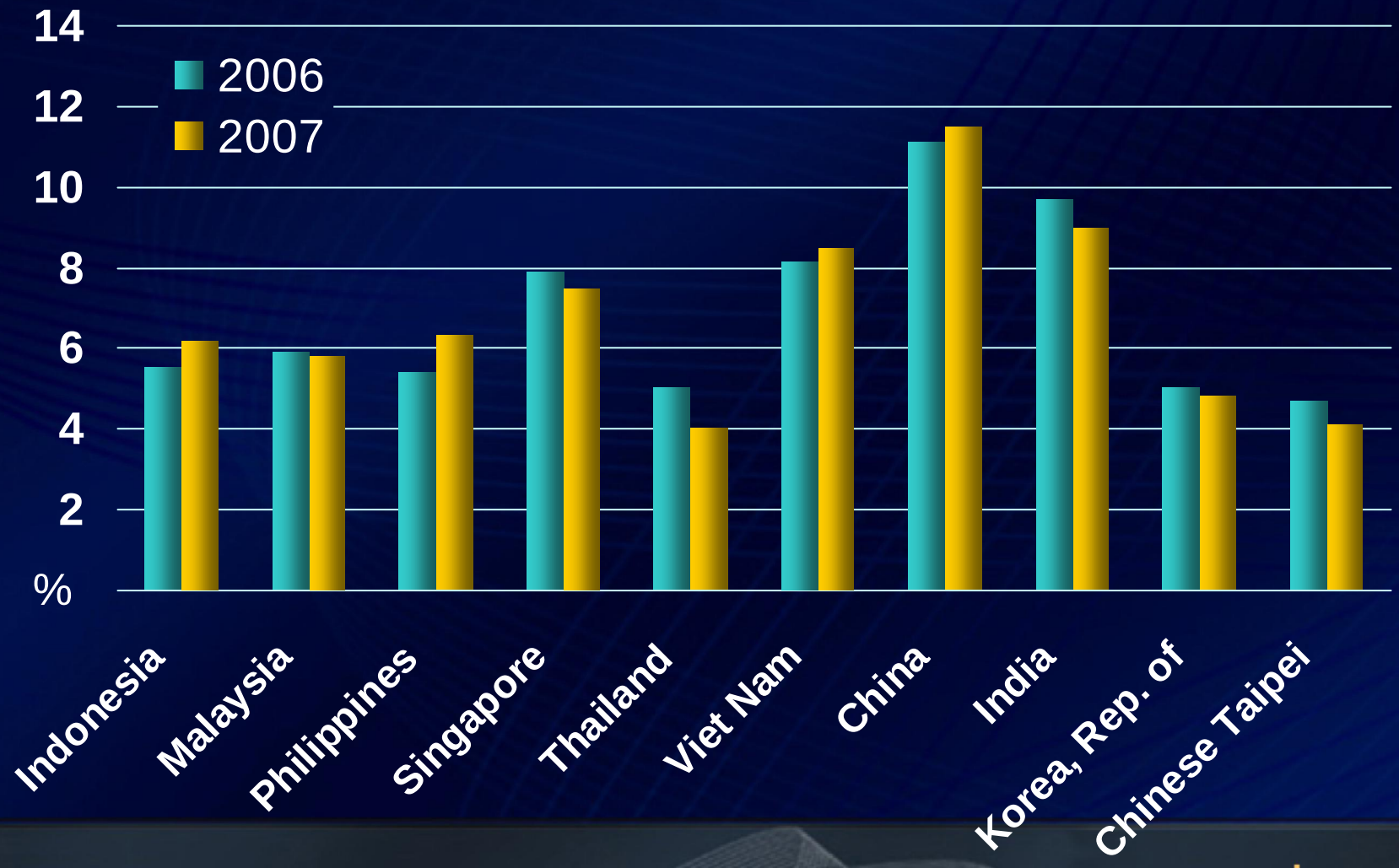
Economic growth in Asia



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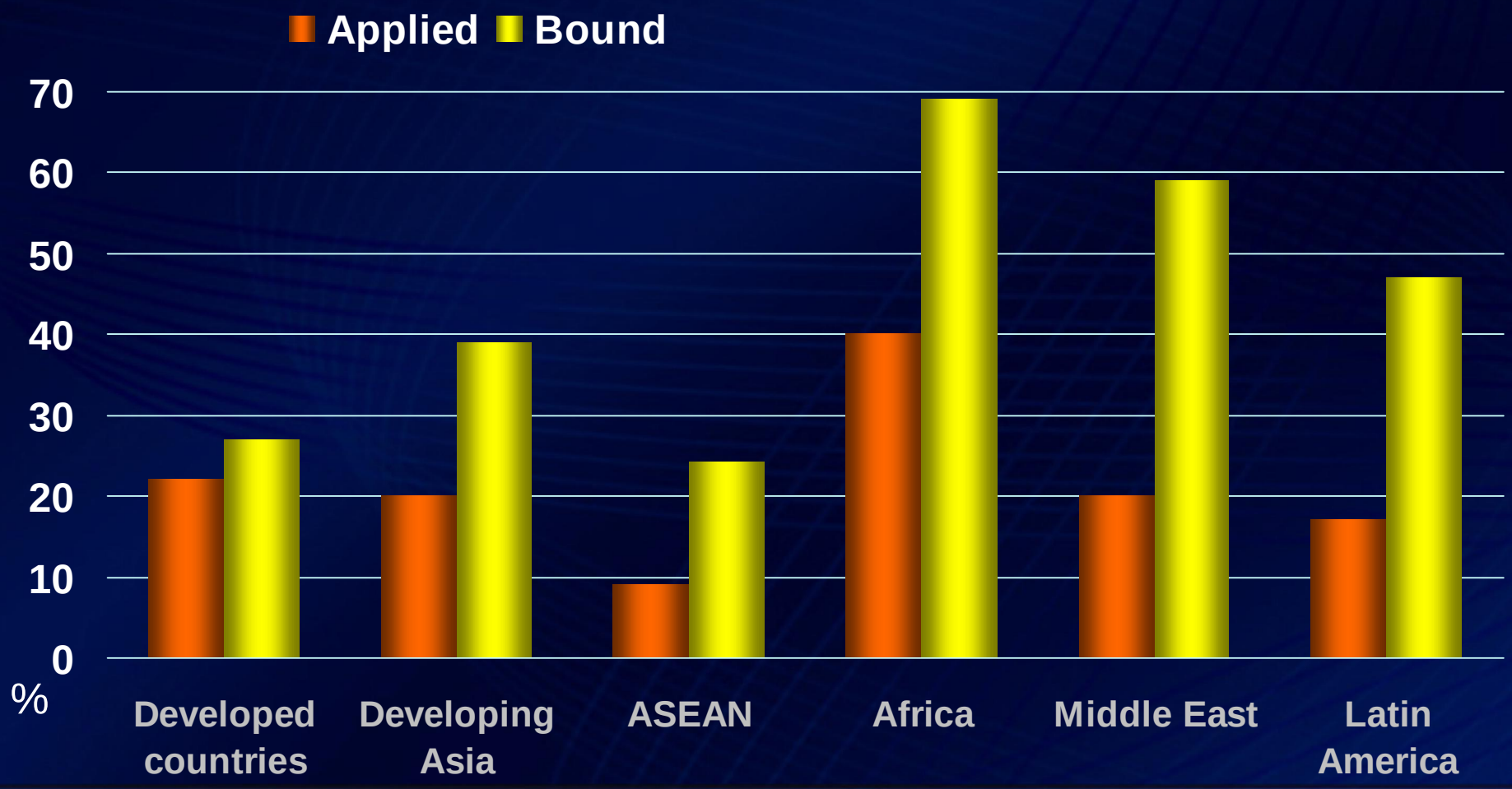
Agricultural applied and bound tariffs



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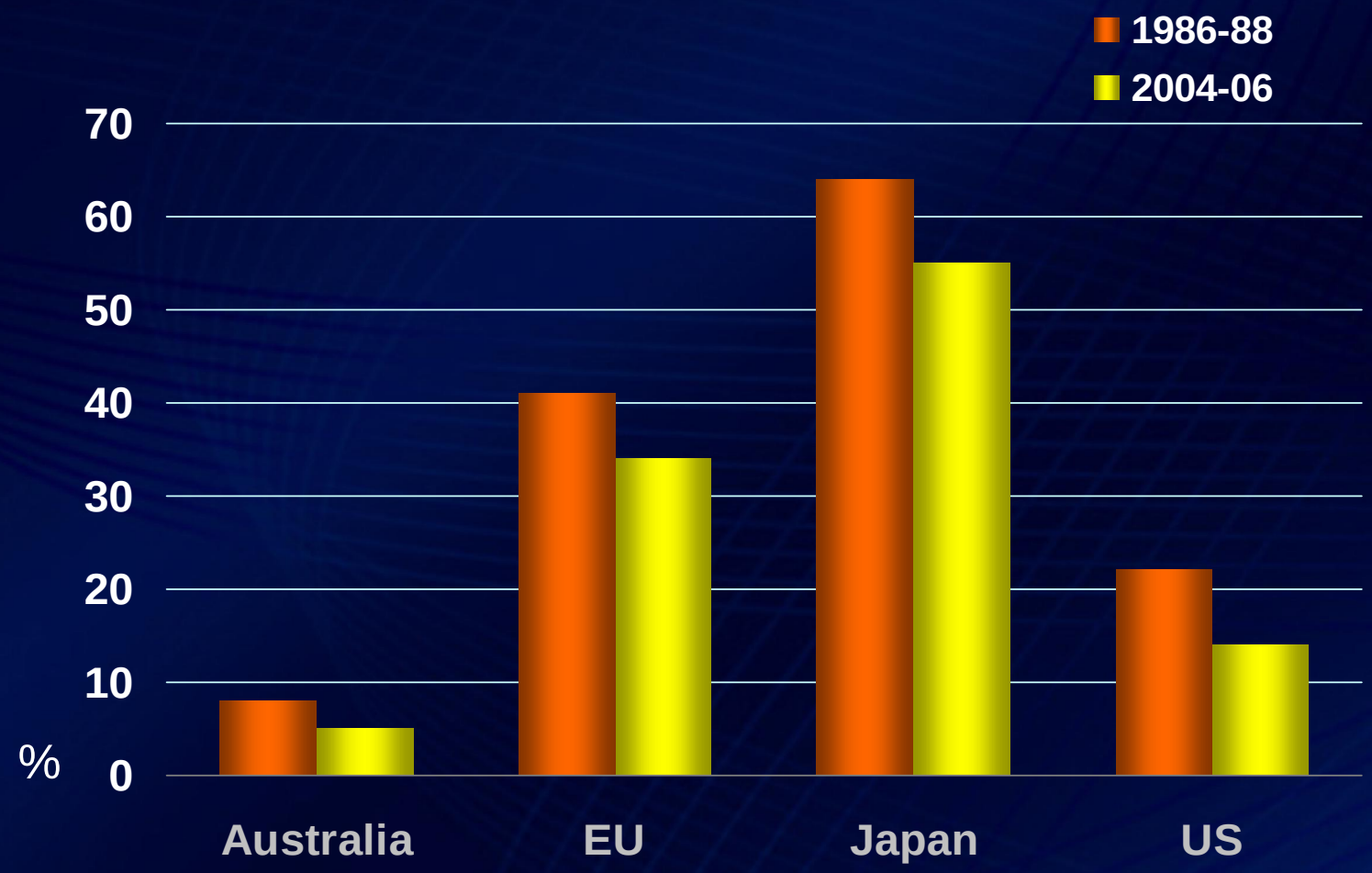
Estimate of producer support

selected countries



Source: WTO data

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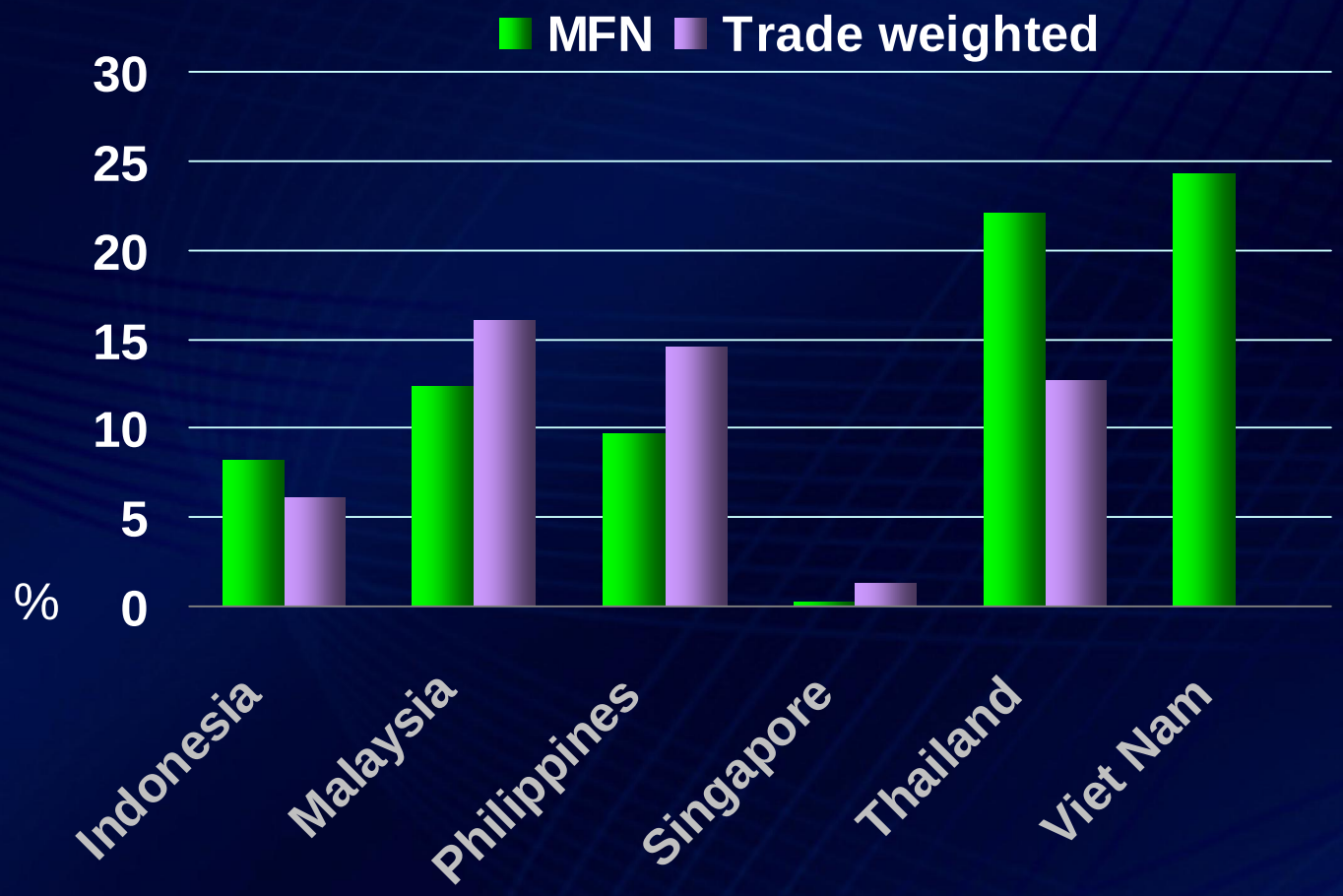
Average applied agricultural tariffs in ASEAN



Source: WTO data

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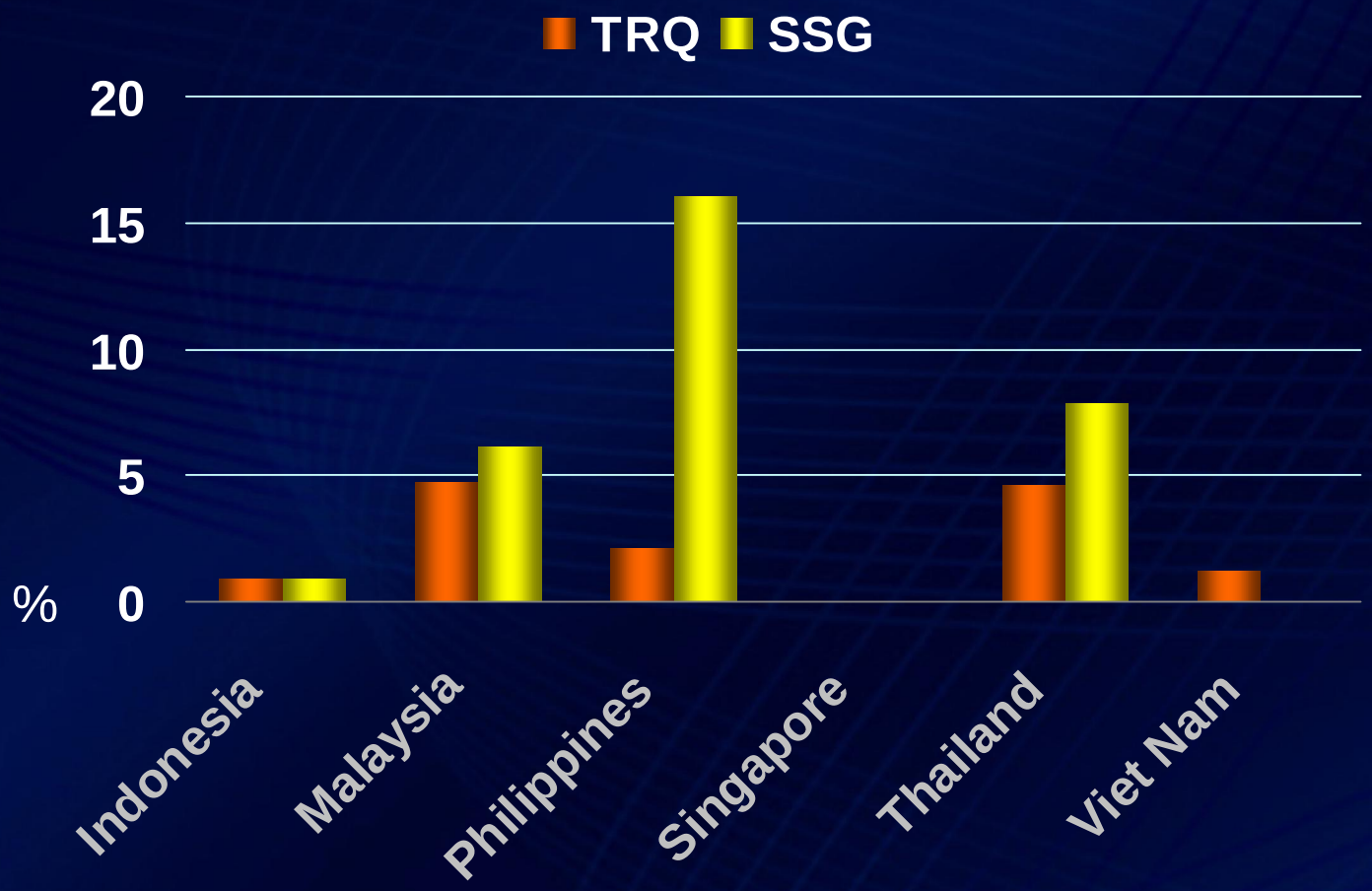
ASEAN Tariff Quotas and Special Safeguards on agricultural imports



Source: WTO data

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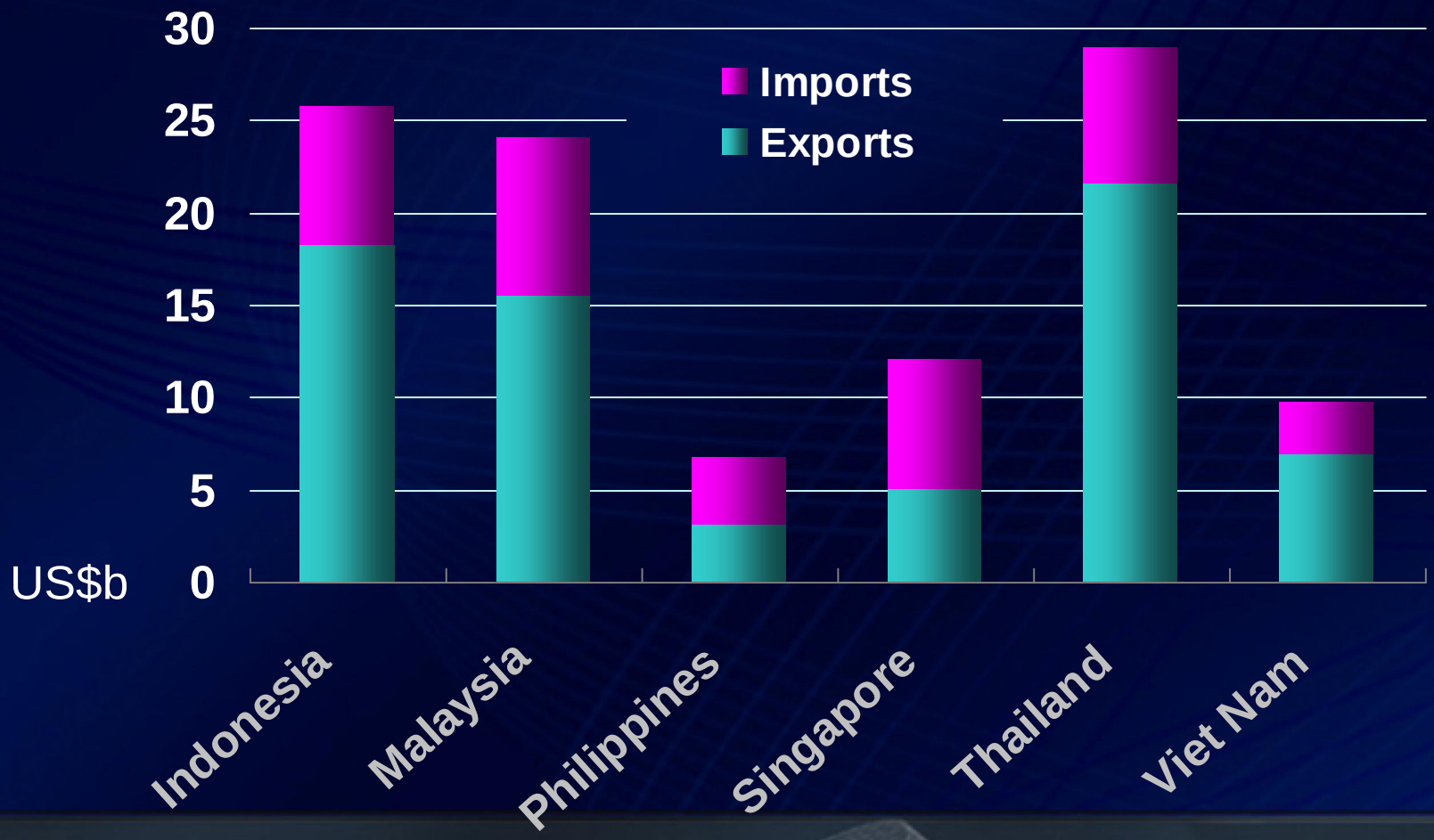
Value of agricultural exports and imports by ASEAN 2006



Source: WTO data

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Modelling the economic impacts of trade liberalisation

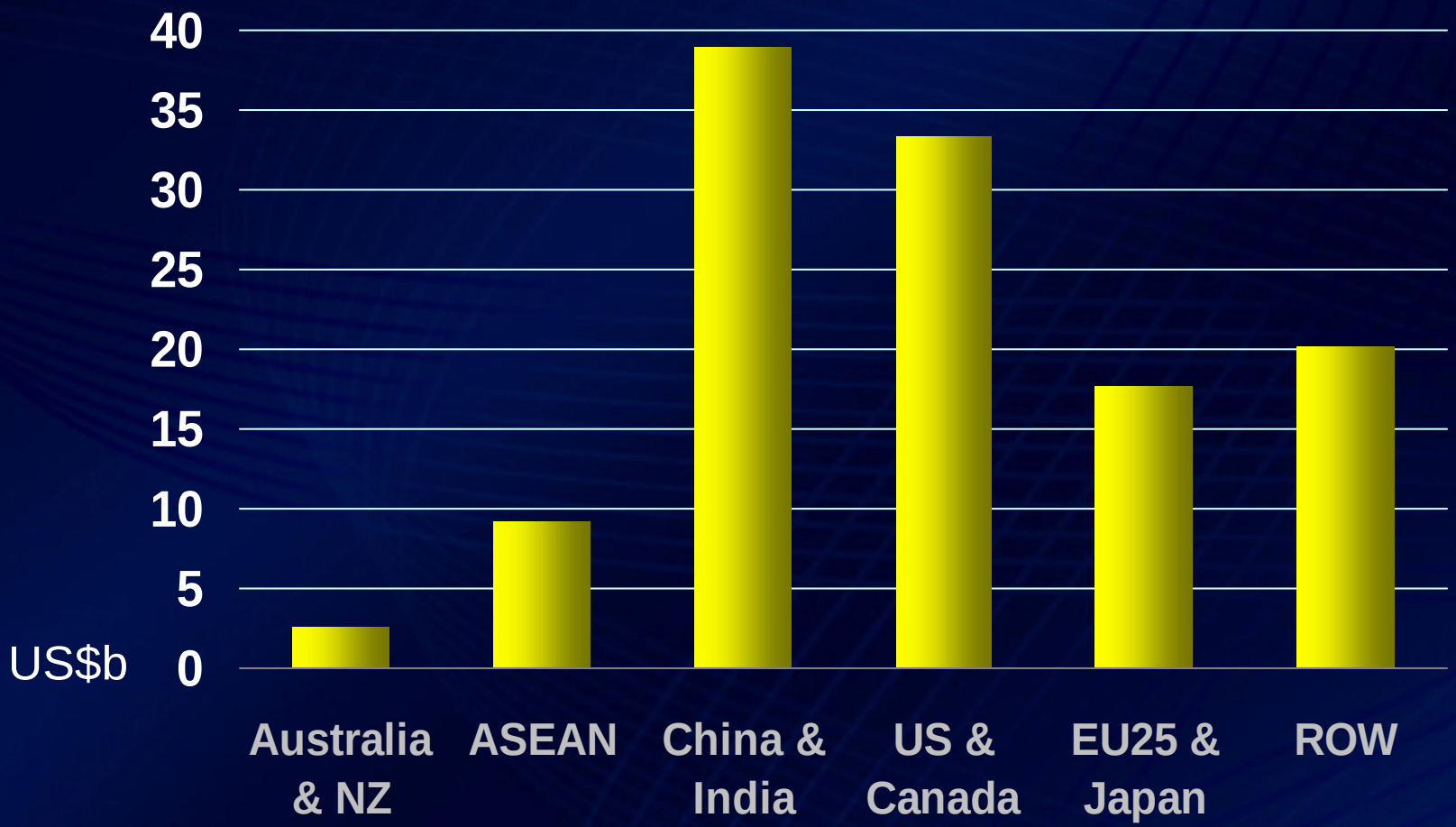
- Features of ABARE's Global Trade and Environment Model (GTEM)
  - State-of-the-art dynamic computable general equilibrium (CGE) model of the world economy
  - Multiregional (87 regions) and multisectoral (66 sectors)
    - includes Indonesia, Malaysia, Philippines, Singapore, Thailand and Vietnam
  - Dynamics: income, population, productivity, etc
  - Rich database on WTO tariffs and subsidies

Scenario – an illustrative example only

- **Scenario 1**: Multilateral trade liberalisation
  - 50 per cent reduction in bound tariffs on all imported products across all countries
    - over a five year period, commencing in 2007.

Does not include investment and services liberalisation, nor reductions to domestic producer support and export subsidies.

GNP gain at 2020



Source: Preliminary GTEM results

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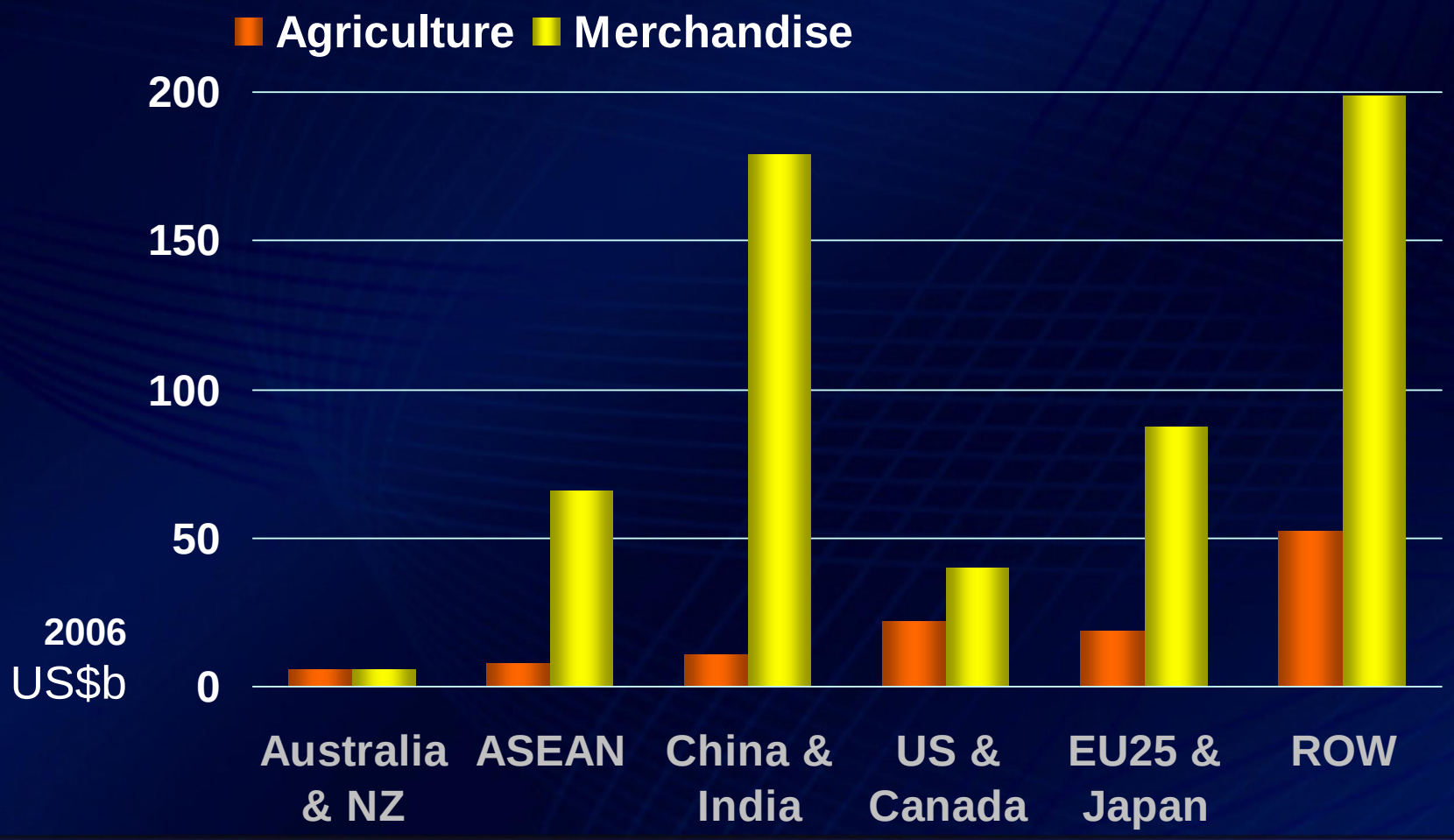
Change in export values at 2020



Source: Preliminary GTEM results

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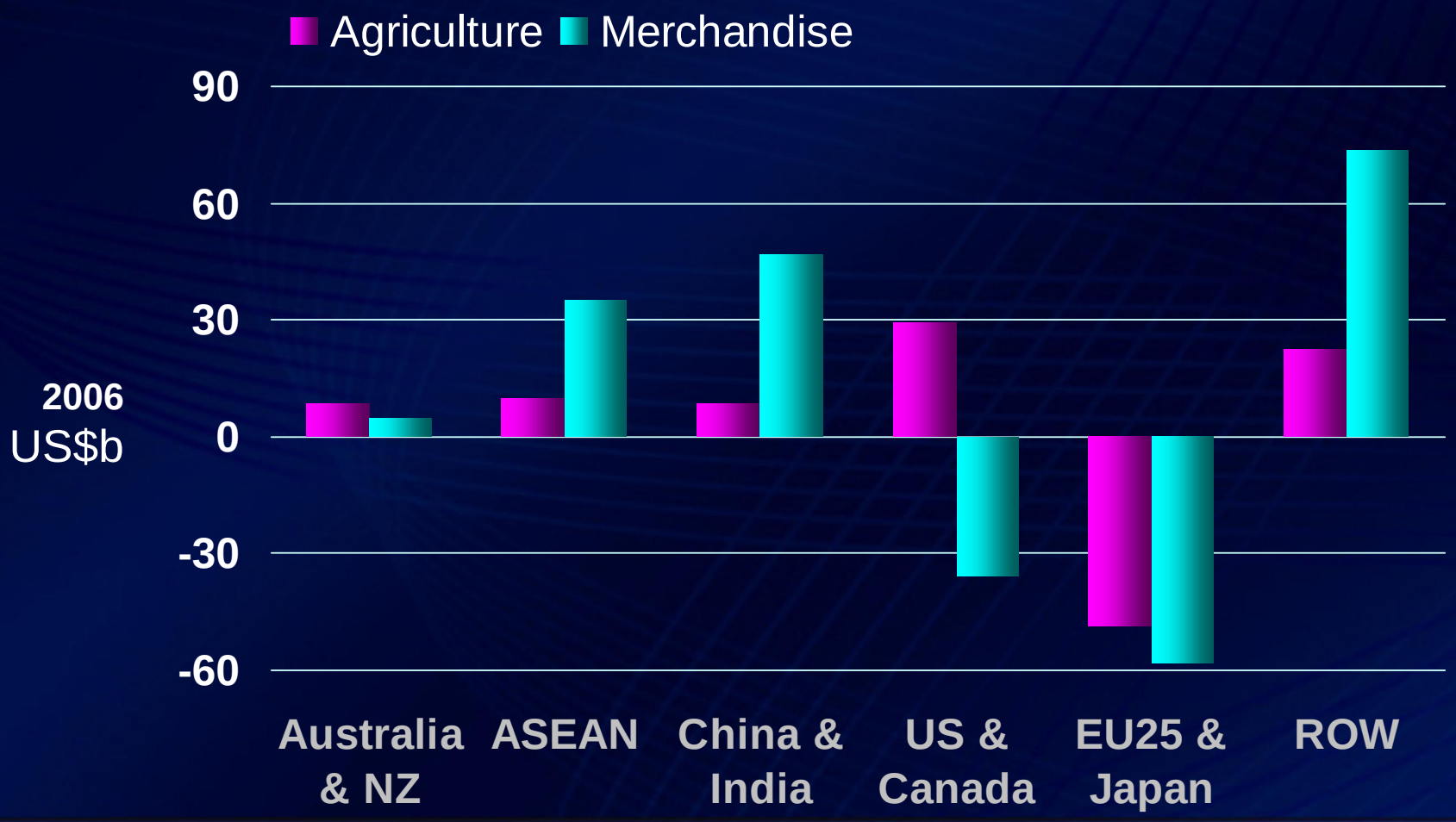
Change in output values at 2020



Source: Preliminary GTEM results

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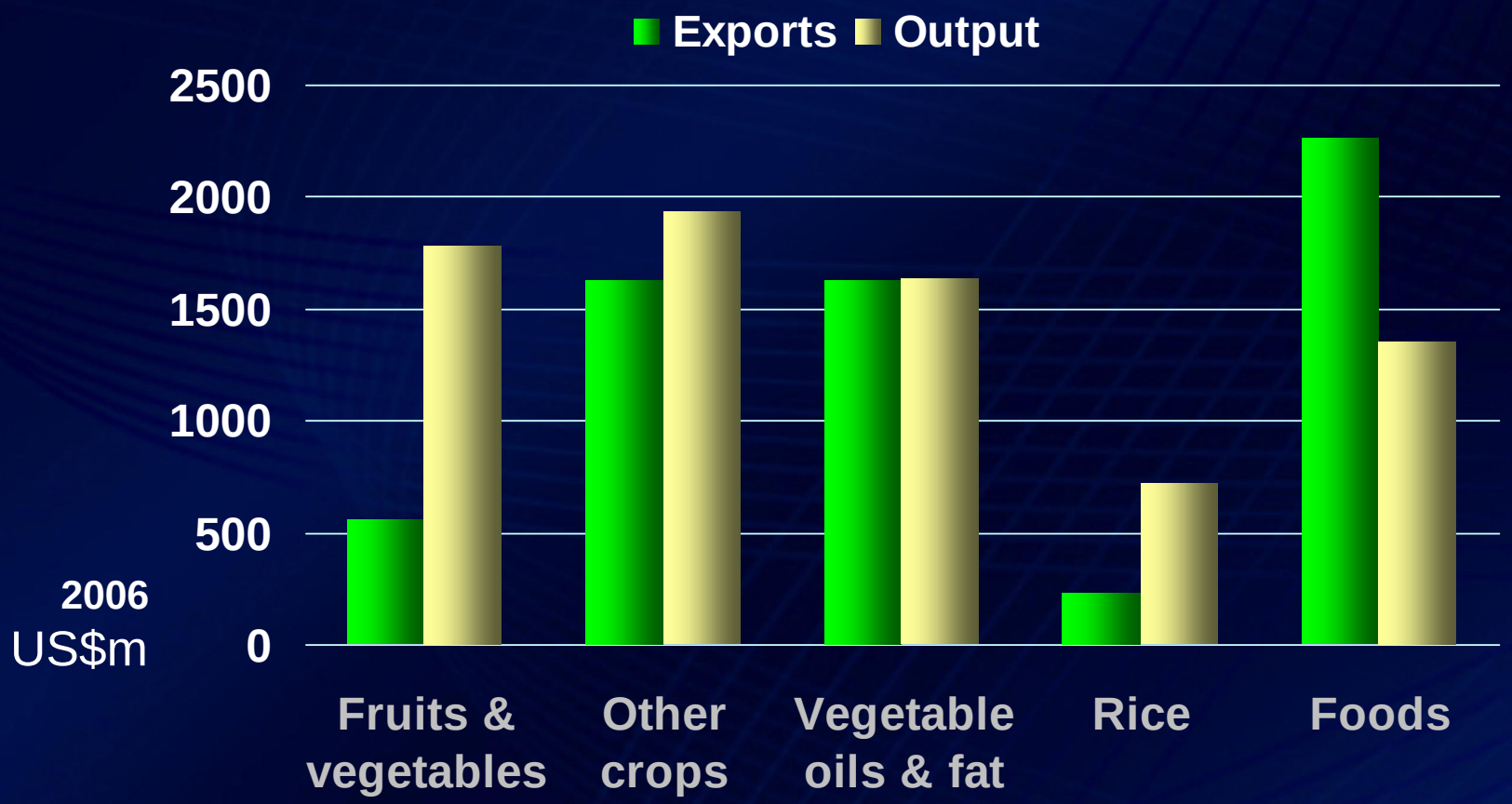
Changes in ASEAN agricultural exports and output at 2020



Source: Preliminary GTEM results

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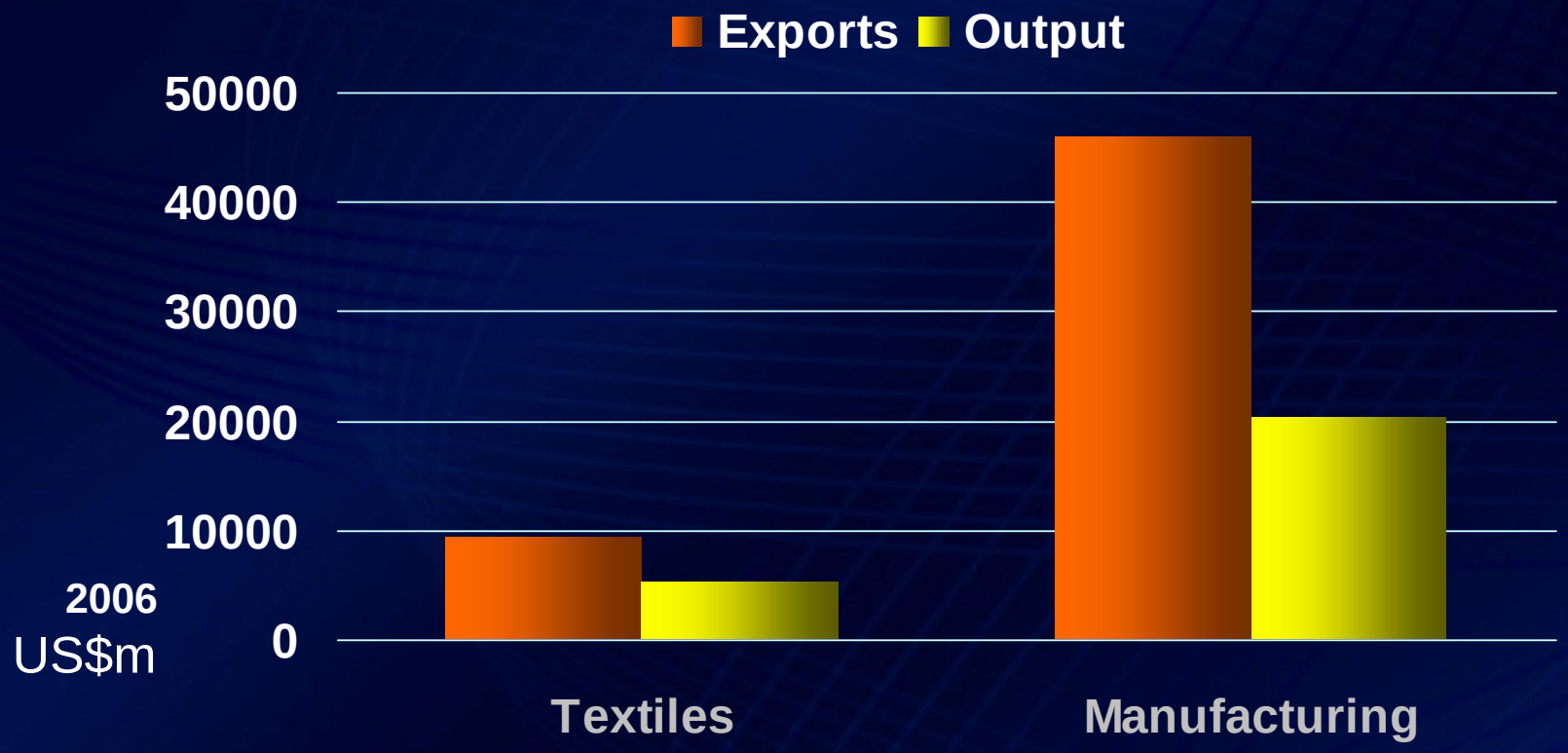
Changes in ASEAN non-agricultural exports and output at 2020



Source: Preliminary GTEM results

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Concluding remarks

- Reducing trade barriers can significantly increase trade and incomes of ASEAN and other countries.

- Substantial gains can be achieved by participating in multilateral and regional trade liberalisation.

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Trade Liberalization and Its Performance of Food Processing Industry in The Republic of Korea

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1. Introduction

Korea's economic development has been based on development plans since 1962 and an export-oriented strategy for economic growth. Korean agriculture has also progressed in line with economic development. The objective of agricultural development was to increase production as Korea had suffered from a chronic food deficiency. However, the importance of the agricultural sector in the Korean economy has been shrinking as industrialization progresses, and the role of agriculture has been slowly decreasing.

Since 1980s, food consumption patterns have substantially changed towards consumption of more high-quality food. As income has grown, the food consumption patterns have shifted from grains to high-quality products such as processed products, meats, vegetables, fats and fruits. The importance of agri-business in the agricultural sector has been gradually increasing according to changes in economic environment. Specially, food processing industry in agri-business has a role to enhance the income of farm households.

Food processing industry enhances the derived demand for agricultural raw materials through processing and increases added value by extending the marketing period of agricultural raw materials through processing and storage. Large scale purchase of agricultural raw materials sent out during harvesting season raises the price of agricultural raw materials during harvest season. Such generation of derived demand and price support effect contribute for increase of farm income. Furthermore, the processing manufactures employ workers, which add to increase of non-farm income, making a potent influence on development of agricultural sector.

However, since the current liberalization for import of agricultural and processed food raises the import dependency on agricultural and semi-processed food, the spreading effect on domestic agriculture by development of food industry becomes smaller. In order to strengthen the linkage between food

industry and domestic agriculture, necessity of fostering the food processing projects, highly using domestic agricultural materials becomes larger. In Korea, the Governmental policies planned to encourage the food processing industry are directed to vitalize local economy and increase farm income. Considering that the agricultural raw materials are used and workers take the initiative in this industry, the food processing industry contributes for development of rural areas as it expands the production infrastructure and maintains agricultural community through developing agri-business.

2. Agricultural trade liberalization

Agricultural trade liberalization and its ratio

Until recently, major agricultural products have been under import restriction to protect domestic producers. However, Korea has been removing trade barriers on agricultural commodities and opened the agricultural market step by step according to the country schedule agreed to in the UR settlement. Table 1 indicates the major results of the Uruguay Round Agreement for the Korean agricultural sector.

Korea imported rice by minimum market access which of 1-4% of domestic consumption has been granted from 1995. The initial and final minimum access quotas were 51,000 in 1995 tons and 205,000 tons in 2004, respectively. The in-quota tariff rate was maintained at 5 %. The quantities of import for barely, and potatoes among major agricultural products are 3-5% of total domestic consumption by minimum market access. The quantities of import for soybean and maize increased above current import levels.

Liberalization of import of agricultural products in Korea has been expanded. Table 2 shows the ratio of agricultural import liberalization. Korea opened 1,436 agricultural products out of 1,452 categories. That is, excluding 16 rice-related categories, a total 1,436 product categories were opened. Therefore, the liberalization ratio of agricultural product imports in Korea reached to 99.1%.

Table 1 Summary of Cereals' commitments

Item	Implementation Period	Bound/In Quota Tariff Rate (%)		Access Quota Level (tons)	
		Beginning	End	Beginning	End
Rice	1995-2004	5	5	51,370	205,228
Barley	1995-2004	20	20	14,150	23,582
Maize	1995-2004	3	3	6,102,100	6,102,100
Soybeans	1995-2004	5	5	1,032,152	1,032,152
Wheat	1995-2004	11.8	9.0	-	-
Potatoes	1995-2004	30	30	11,286	18,810

Source: WTO(1995), *Summary of the Results of the Uruguay Round in the Meat Sector*.

Table 2 Agricultural import liberalization ratio

	1990	1995	2000	2005
Total agricultural products	1,448	1,513	1,672	1,698
No. of items liberalized	1,241	1,446	1,648	1,682
(Ratio)	(85.7)	(95.6)	(98.6)	(99.1)
Agricultural Products	1,166	1,227	1,435	1,452
No. of items liberalized	973	1,160	1,411	1,436
(Ratio)	(83.4)	(94.5)	(98.3)	(98.9)
Forestry products	282	286	237	246
No. of items liberalized	268	286	237	246
(Ratio)	(95.0)	(100.0)	(100.0)	(100.0)

Source: Major Statistics of Agriculture and Forestry, Ministry of Agriculture and Forestry, various issues.

Trade of Agricultural products

Table 3 shows the trend and structure of agricultural exports during the period of 1990-2006. The total value of agricultural and forestry exports in 2006 was US $2.3 billion, which was over 1.6 times the value of exports in 1990. These figures show that the amount of exports in Korea has been gradually increasing. Vegetables and livestock products showed a high growth rate. However, exports of forestry products tend to continuously decline from 610 million dollars in 1990, to 150 million dollars in 2000, and to 124 million dollars in 2006. Due to the poor progress in forestry products such as stone products, wood products, chestnut, pine mushroom and oak mushroom

Table 3 Exports of agricultural products

Unit : million US dollars

	1990	1995	2000	2005	2006
Agricultural products	727	1,087	1,134	1,899	2,008
Cereals	4	5	11	8.6	12
Fruits	43	60	45	121	98
Vegetables	10	111	186	231	204
Livestock products	68	156	144	173	172
Forestry products	610	505	255	150	124
Total	1,405	1,747	1,533	2,222	2,304

Source: Statistical Yearbook of Foreign Trade, Korea Customs Service, various issues.

Table 4 shows the value of agricultural products imported during the period of 1990-2006. The total import value of agricultural and forestry products in 2006 was 13.3 billion dollars, which is over 2.5 times the value of imports in 1990. The imports of the agricultural products were 3.3 billion dollars in 1990,

5.1 billion dollars in 2000, and 8.1 billion dollars in 2006. These figures show that the value of imports in Korea has been increasing. Cereals such as wheat and maize, which cannot be produced economically in Korea, were 2.1 billion dollars; these imported cereals are used as raw materials for food processing. Livestock products were imported to the amount of 2.7 billion dollars in 2006. During this period, the import value of livestock, vegetable and fruits were greater than that of other agricultural and forestry products. Trends in imports of such products reflect household consumption patterns. For forestry products, 2.5 billion dollars were imported in 2006.

Table 4 Imports of agricultural products

Unit: million US dollars

	1990	1995	2000	2005	2006
Agricultural products	3,308	5,675	5,105	7,397	8,117
Cereals	1,646	1,898	1,532	2,023	2,116
Fruits	36	315	349	616	713
Vegetables	24	140	187	330	412
Livestock products	446	1,244	1,679	2,361	2,749
Forestry products	1,665	2,778	1,667	2,131	2,462
Total	5,419	9,677	8,451	11,889	13,328

Source: Statistical Yearbook of Foreign Trade, Korea Customs Service, various issues.

Trade of Agricultural processing products

Table 5 shows the trend and structure of agricultural processing exports during the period of 1990-2006. The total value of agricultural processing exports in 2006 was 482 million dollars, which was over 3.0 times the value of exports in 1990. These figures show that the amount of exports in Korea has been gradually increasing. Candy, bread, noodles and ice products showed a high growth rate.

Table 5 Exports of agricultural processing products

Unit: million US dollars

	1990	1995	2000	2005	2006
Candy and cake	30	144	112	139	128
Grain processing	14	12	17	36	38
Bread products	5	47	22	24	36
Noodles	40	90	118	192	166
Ice products	0.2	6	2	7	10
Others	70	105	98	125	104
Total	160	404	369	524	482

Source: Statistical Yearbook of Foreign Trade, Korea Customs Service, various issues.

The total value of imported processing products was 233 million dollars in 2000 and 521 million dollars in 2006. The value of candy, bread products, noodles and ice products in 2006 was 97 million dollars, 52 million dollars, 60 million dollars and 11 million dollars, respectively.

Table 6 Imports of agricultural processing products

Unit: million US dollars

	1990	1995	2000	2005	2006
Candy and cake	26	52	48	87	97
Grain processing	9	1	6	10	13
Bread products	1	9	26	51	52
Noodles	7	23	38	56	60
Ice products	0	4	6	8	11
Others	48	177	109	236	287
Total	91	267	233	448	521

Source: Statistical Yearbook of Foreign Trade, Korea Customs Service, various issues.

3. Food industry

Background related to food industry

Since the 1980s, the pattern of food consumption in Korea changed significantly in terms of volume and quality. As income has grown, food consumption has shifted from grains to processing products, livestock products, vegetables, fats and fruits. Per capita rice consumption is declining, peaking at 136.4kg/year in 1970 to 78.8kg/year in 2006 according to the changes in consumption pattern and higher income.

While per capita grain consumption is decreasing, consumers are beginning to spend more on processed products, vegetables, fruits and livestock products. The increased consumption of meat was by direct import abroad and also met by the expansion of domestic livestock production, which resulted in a huge amount of feed grain imports. Also, a portion of processed products in the food expenditures has been slowly swelling.

If we look at the expenditure change of food consumption per household, the consumption ratio of fresh raw products out of total food consumption in 1982 stood at 77%, however, it decreased to 40% in 2006. On the other hand, the consumption ratio of processed products increased 2.6 times from 23% in 1982 to 60% in 2006.

The proportion of food processing in total supply of agricultural products increased from 12.5% in 1990 to 18.0% in 2003. The processing rate of agricultural products has increased as the demand for processed foods increased. The processing rate of domestic agricultural products increased from 11.4% in 1990 to 14.3% in 2003, and the processing rate of imported agricultural products increased from 26.4% in 1990 to 38.9% in 2003, resulting in the increase in the

import of agricultural products for processing purposes. Among domestic agricultural products, dairy products and edible crops, such as barley, soybeans and oil crops, are relatively highly utilized for manufacturing processed agricultural products. Among imported agricultural products, which are used in manufacturing at relatively higher rates, are soybeans, potatoes and edible forest products.

One of the reasons for low processing rate is low self-sufficient rate of domestic agricultural products. The self-sufficiency rate of grains decreased from 43% in 1990 to 27% in 2006. The self-sufficiency rates of wheat and corns are 0.2% and 0.8% respectively, which are very low despite the fact that they are closely related to food and feed industries. In the case of soybean, it is closely related to the soybean and soybean curd industries, but its self-sufficiency rate decreased from 20.1% in 1990 to 11.3% in 2006. The self-sufficiency rate of meat has decreased from 90.0% in 1990 to 72.2% in 2006.

Table 7 Food processing ratio of domestic and import products

Unit: billion Korean Won, per cent

		1990	1995	2000	2003
Agricultural processing	Amount	2,765	4,034	5,925	8,312
	Ratio	12.5	11.9	15.0	18.0
Domestic products	Amount	2,311	3,103	4,812	5,620
	Ratio	11.4	10.2	13.5	14.3
Import products	Amount	454	931	1,113	2,692
	Ratio	26.4	27.0	29.8	38.9

Position of food processing industry

The food industry is the demand source of agricultural products. It plays the role of connecting agriculture with consumers to increase its value. Also, the food industry contributes to increasing farm household's income through food processing activities. Therefore, it is helpful to strengthen the connection between the agricultural industry and the food industry for their mutual development.

The effect of food industry on domestic economy is increasing. The value addition and importance of industries show that the agricultural and forestry's share on the entire domestic economy has decreased from 6.8% in 1991 to 3.5% in 2003. Also, the share of agriculture and forestry production on related industries of agriculture and forestry had decreased from 39.1% in 1991 to 30.2% in 2003. On the contrary, the food industries, including food processing, distribution, and service, increased their share on agriculture related industries from 38.7% to 47.9% in the same period. This increase in importance well distinguishes the importance of the food industry.

To analyze the food industry's present conditions by category, it is worthwhile to review the transition of the food processing industry (the food and drink manufacturing industry) in terms of number of manufactures, total sales,

and production amount. For instance, the number of food processing businesses has increased from 4,595 in 1980 to 8,389 in 2005. Similarly, total sales amount has increased from 3.9 trillion Korean won to 48.3 trillion Korean won during the same period. The industrial size of food processing has increased dramatically through this. Such enlargement in scale can be noticed from the food processing industry of 2005. Manufactures with more than 500 employees accounted for only 0.2% share of the industry, but their total sales amount accounted for as much as 8.9%. The reason behind the food processing industry's enlargement in scale is that it is easier to finance the development of new products and marketing costs and it has the advantage of increasing the efficiency in manufacturing process.

Structure of tariff rate in food processing products

The import methods of the minimum market access and current market access are state-operated trade, import concession auction, and actual user assignment. Private imports which do not rely upon such methods can be freely imported by paying a high tariff (an ad valorem tax or specific commercial tariff). State-operated trade and import concession auction are methods for a designated organization to import agricultural products for domestic consumption. Actual user assignment is a method for private manufactures to import agricultural products for domestic consumption, such as feeding, breeding, provision of medical supplies, and other purposes at a low tax rate.

Industry protection and consumer protection are reflected in the current tariff rate system. Soybeans, corns, and other market access products which are imported in large amounts have a 5% lower tariff rate, but other products imported besides the market access products have a higher tariff rate. Among agricultural products, items with a lower tariff rate are mostly items that are not produced in Korea, such as seeds, agricultural raw materials for industrial purposes, and items the supply of which is absolutely insufficient. In the case of crops, most of the crops and grain processed products except wheat have a characteristic showing de-escalation. In order to protect the livestock industry, in particular, feed crops and meals are imposed with a low tariff rate.

Due to the tariff reduction policy in the mid 1980s, most processed foods were not only treated as general industrial products but the tariff on such products were also lower than those of agricultural raw materials since they were used as raw materials for other industrial products. The items where a higher tariff was imposed were dairy processed products, meat processed products, and fruit juice with a high domestic production share. The tariff rates of processed products utilizing dairy products, fruit, vegetables, nuts, and other raw agricultural products is lower than their raw agricultural products; therefore, it is showing a de-escalation system.

4. Soybean processing industry

Situation of soybean industry

Total production of soybean was 233 thousand tons in 1990, however, it decreased to 183 thousand tons in 2005. The reason for the declining trend in the production of the soybean was that farmers did not want to cultivate soybean because income from soybean cultivation was lower than that from other agricultural products. The utilization of the soybean is divided into several purposes as follows: i) direct food purposes; ii) processed food-tofu, soybean oil, soy sauce and soy paste; and iii) feed.

Total consumption of soybean showed at the point of 1,513 thousand tons in 2005 and soybean for processing increased from 271 thousand tons in 1990 to 351 thousand tons in 2005. Soybean for feed purposes decreased from 1,254 thousand tons to 990 thousand tons. While the demand of soybean products has increased, the production of soybean has stagnated. The imports of soybean increased from 1,092 thousand tons in 1990 to 1,330 thousand tons in 2005, an increase by 1.22 times during that period.

Table 8 Soybean production, imports and consumption

Unit: thousand tons

	Production	Imports	Consumption			
			Food	Processing	Feed	Total
1990	233	1,092	84	271	866	1,254
1995	160	1,435	81	321	1,142	1,558
2000	113	1,567	85	314	1,254	1,687
2005	183	1,330	90	351	990	1,513

Source: Major Statistics of Agriculture and Forestry, Ministry of Agriculture and Forestry, various issues.
Note: Based on the crop year from November to October.

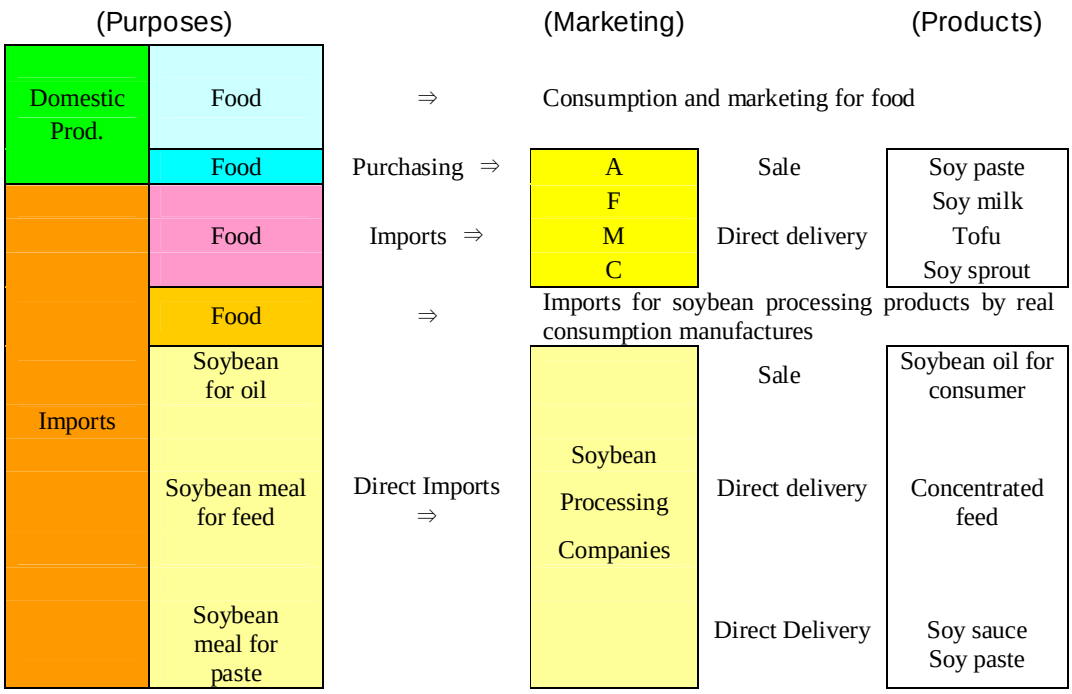
Soybean marketing structure

The marketing structure of soybean is shown in Figure 1. Supply of soybean is from domestic production and imports, and the demands can be generally classified into feeding, processing, and edible use. The majority of the soybean produced is consumed for food. Imported soybeans are used for feed, soybean oil, soybean curd (tofu), soybean paste and other processed food.

The National Agriculture Cooperative Federation purchases 7 % of the total domestic soybean in 2005 and distributes it to the Agricultural and Fishery Marketing Cooperation (AFMC). The AFMC pools the domestic and imported soybean products together and supplies all of them to processing companies. Soybeans for processed food are imported by the AFMC under a state trade and are provided to actual manufactures under the soybean curd association, soybean paste association and soybean sprout association. Recently the AFMC imported an amount of 250 thousand tons and provided as a raw material for soybean processing.

Also, soybeans for soybean oil are imported by private soybean oil manufacturers producing soybean oil and soybean meal, the residual product, is sold to feed manufacturers or soybean paste companies.

Figure 1 Soybean consumption and marketing structure



Soybean processing industry: Soybean oil and meals

Soybeans have slight differences but mostly have 40% protein and 20% fat. Only a small part of total soybean production worldwide is used for edible use, and most soybeans are used for processing purposes. When soybeans are processed, soybean oil and soybean meal are produced at the ratios of 18% and 78%. Soybean oil is used for households and provided to consumers (restaurants included), and soybean meal is rich in protein, so it is used as a core raw material in producing assorted feed for livestock.

Due to the weakening of domestic soybean production structure, soybean processing manufacturers imported all of the necessary soybeans for the production of soybean oil and soybean meal, which is a key ingredient of concentrated feed. Tariff concession for soybeans is 5% whereas soybean oil is 5.4% and soybean meal is 1.8%. Thus, low tariff is imposed on soybean oil and soybean meal, causing the soybean market to be encroached by low-price imported products. The domestic soybean processing industry is having a hard time in establishing an appropriate sale price due to cheap imported products.

Table 9 Tariff rates of Soybean products

Unit: per cent

	Korea	USA	E U	Japan	China
Soybean	5.0	0	0	0	0
Soybean oil	5.4	19.1	9.6	21	9
Soybean meal	1.8	1.9	0	0	5

In 2005, the domestic demand for soybeans was 430 thousand tons. Of these, 256 thousand tons were imported, holding an approximately 60% share of the domestic soybean market. Due to the increase in imported soybeans, domestic soybean production is in a decreasing trend. Soybean meal's domestic demand is 2.186 million tons, of which 1.491 tons are relying on imports. The imported soybean meal's market share is 68%.

Table 10 Soybean oil and soybean meal demand and supply

Unit: thousand tons

			'95-'99 Average	2003	2004	2005
soy-bean oil	Demand		283	378	400	430
	Supply	Domestic production	212	216	177	174
		Imports	71	163	223	256
	Market shares of imports (%)		25.2	43	55.8	59.5
Soy-bean meal	Demand		1,884	2,338	2,077	2,186
	Supply	Domestic production	898	882	726	695
		Imports	987	1,456	1,351	1,491
	Market shares of imports (%)		52.4	62.3	65	68.2

Sources: Korea Soybean Processing Association

Soybean sauce and pastes

Soybean sauce and soybean paste are used in Korea as well as China and Japan. Soybean sauce contains 25% of salt and it is an important spice having brown color. The method to make soybean sauce is to boil soybean and naturally ferment it, and dip it in salt water for 1~2 months. After fermentation, the taste and moisture are controlled. Soybean paste is the residue from soybean sauce making. Pepper paste is a red-colored spice, which is made by mixing fermented soybean powder, red pepper powder and salt.

In 2005, 150 thousand tons of pepper paste, 160 thousand tons of soybean paste, and 200 thousand kiloliters of soybean sauce were produced by manufactures. The estimated market values of the paste and sauce were 300 billion Korean won for pepper paste, 200 billion Korean won for soybean paste, and 180 billion Korean won for soybean sauce. As the number of households making their own pastes is decreasing, the entry of new manufactures into the paste market is increasing. Pastes are the basic ingredients in Korean food and

therefore severe competition among businesses to occupy the market is expected. However, the paste market is expected to expand gradually.

Soybean curds

Soybean curd is made by grinding boiled soybeans and squeezing the juice from the grinded soybean, and the process is followed by the boiling of the juice and adding brine to the curds. As of the end of 2006, there were 1,600 soybean curd manufacturers. However in 1995, there were only 500 soybean curd manufacturers, but as the regulations and policies concerning business registration and food sanitation were eased, street vendors and other small businesses were established in great numbers.

The soybean curd manufacturers using 2.5 tons or more raw soybeans per day, considered as a fairly large business, took up 2.2% of the total business. Such large businesses consisted of 35 manufacturers, and the large manufacturers used more than 20% of the total raw soybeans for soybean curds. The manufacturers using soybeans of 0.25 tons or less per day took up more than 80% of the business. In 2006, a total of 142 thousand tons of raw soybeans (123 thousand tons of soybeans and 19 thousand tons of powder) were used for soybean curd production.

General small manufacturers produce unpackaged soybean curds, but most large manufacturers produce packaged soybean curds. The soybean curd market is estimated to have stood at 440 billion Korean won in 2006; and 57% of it, or 250 billion Korean won, is for the packaged soybean curds, signaling a growth of the packaged soybean curd market. Due to the decrease in soybean cultivation by domestic farms, the supply of soybeans has shrunk and the price has increased. Most of the soybeans supplied to soybean curd manufacturers are replaced by imported soybeans. Currently, soybeans for soybean curds are strictly imported and provided with non generically modified organic soybeans.

Effects of import price changes on soybean product prices

The import price effects on domestic prices can be divided into changes in import prices imported and changes in exchange rates. Exchange rates among currencies are simply the prices of a country's money in terms of other currencies. Domestic prices of products are translated by exchange rates. Like other prices, exchange rates are subject to change. When a country's currency rises in value relative to those of other countries, exports tend to decrease and imports tend to increase. When a country's currency falls in relative value, exports tend to be increased and import decreased. When a currency's value is rising internationally, domestic prices of imported products tend to decrease and foreign prices of the same products tend to increase. When a currency's value is falling, domestic prices of imported products tend to increase, while international prices tend to decrease. To analyze import and exchange rate effects, the following equation is applied:

$$(7.5) \qquad \ln P_d = \beta_0 + \beta_1 \ln P_m + \beta_2 \ln E$$

where P_d is the domestic price in importing country, P_m is the import price of the commodity imported from a country, and E is the exchange rate expressed in units of domestic currency per unit of the exporting country's currency. The β_1 and β_2 mean price transmission and exchange rate pass-through elasticity. β_1 implies the level of how much import prices transmit to domestic price. β_2 implies the level of how much exchange rates pass to domestic price through international financial markets.

The results of analyses are shown for the period of 1990-2006 in Table 11. The price transmission elasticity of soybean shows that given a 1% increase in the import price, domestic consumer price of soybean increases by 0.97%. The exchange rate pass-through elasticity of soybean shows that given a 1 % increase in the exchange rate, the domestic consumer price of soybean increases by 1.61 %. The high figures mean that the domestic consumer price of soybean is a very sensitive to changes in import price and exchange rate.

The price transmission and exchange rate pass-through elasticity for soybean oil are 0.71 and 0.93, respectively. The domestic consumer price of soybean oil is more affected by the change in exchange rate than the change in import price. The price transmission elasticity of soybean curd are lower. Given a 1 % increase in the import price of soybean, the soybean curd price paid by consumers increases about 0.4 %. The low price elasticity corresponds to the fact that the soybean curd is made by domestically produced and imported soybeans.

Table 11 The effects of import price changes on consumer prices

	Price transmission elasticity	Exchange rate pass-through elasticity
Soybean consumer price	0.97	1.61
Soybean oil consumer price	0.71	0.93
Soybean paste consumer price	0.80	1.22
Soybean curd consumer price	0.40	1.16

5. Recommendations

In the midst of growing trade agreements like the UR agreements, DDA negotiations, the Korea-U.S. FTA and other similar measures for market opening, the domestic agricultural production is expected to decrease. As a result, quality enhancement of agricultural products and strengthening of competitiveness by raising product safety have emerged as key tasks. Under these circumstances, and if the food processing industry can provide safe and high-quality domestic agricultural products at low prices, it can contribute to the creation of demands for domestic agricultural products and to the stabilization of prices.

However, Most food processing enterprises belong to the small and medium

enterprises and usually lack in technology and capital required for continuous development of new products. In order to encourage the food processing industry, specially, soybean processing industry, the following points are to be considered:

The import system should be changed from a collective import method imposed by the government to one that facilitates actual user groups to directly import soybeans of different qualities consumers demand.

Due to changes in the consumer and circulation environments, diversification and desire for high-quality products are increasing in the edible oil market. Now there are needs to turn from low variety mass production to diverse production and expand the line of products to stimulate consumer's desire to purchase. After the market opening, there were many instances where the increase in the number of businesses and the subsequent deepening of competition among distribution firms resulted in both soybean oil producers and sellers not making enough profits. It is necessary for the businesses to turn their attention from price competition to quality-based competition.

Soybean sauce and paste products are traditionally handed down from generation to generation, and as Korea's basic spices, these will continue to be used as beloved spices. However, unlike the food industry in general, flooding of small businesses, low quality, excessive competition, and dilapidation of machines are some of the problems that need to be solved. For the overall paste industry's development, diverse product development, facilities investment, experts training, and research and development should be promoted positively.

The food processing enterprises have close relation with regional agriculture and they generate considerable added value through employing the regional agricultural products for raw materials. However, they are still many stiff problems for the success of promotion policy for the food processing industry. Management improvement and sales promotion should be achieved both ways.

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Agricultural Markets Liberalization in Chile: Outcomes in the Horticultural Industry

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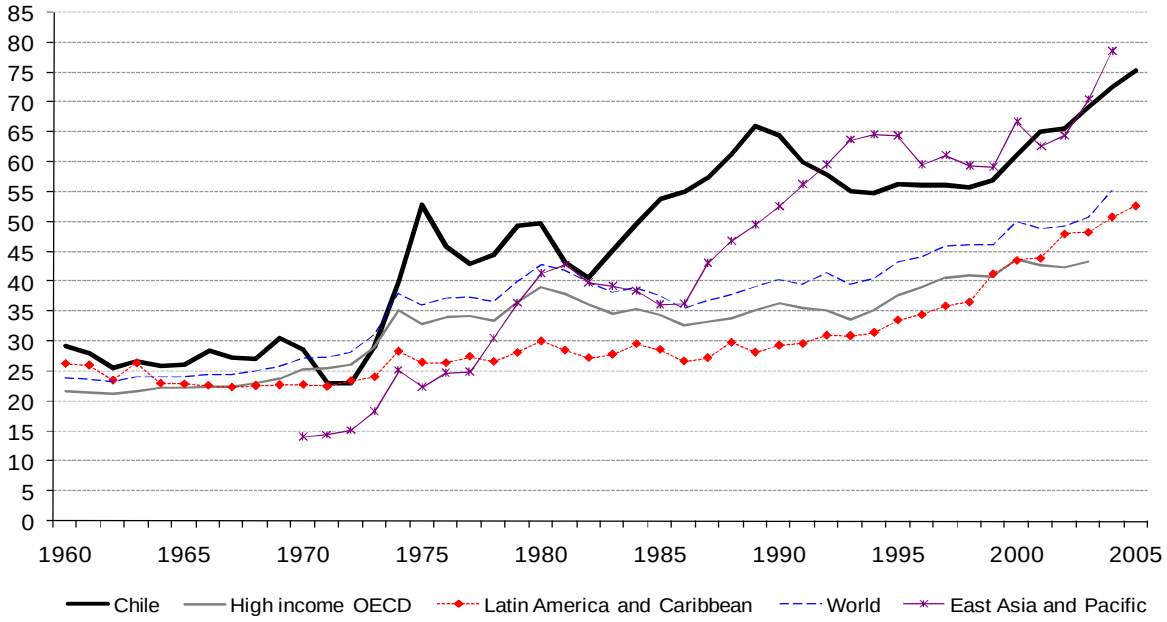
Chilean economy: core elements.

Chile was a pioneer of liberalising reforms.

The country's economic growth since the restoration of democracy in 1990 has been the fastest in the region, although it has not been as prodigious as the rates recorded in East Asia.

Support of Chile's strong economic performance has been a record of sound macroeconomic management and institutional and structural reforms that have led to the emergence of a market-oriented economy. The economy has become progressively more open, with a ratio of exports plus imports to GDP of about 75% that is higher than anywhere outside East Asia.

Trade openness (%GDP,1960-2005)



Note: For each country, openness is measured as the sum of exports and imports as a ratio of GDP. The country group measures are the simple average of all countries in that group.
Source: World Bank, World Development Indicators, 2007.

Since 1974, Chile adopted unilaterally an open trade regime characterized by low and uniform import tariffs with few exchange or trade controls. The government has continued to open the country's markets, first by unilaterally lowering tariffs and then by concluding a series of free trade agreements. The uniform tariff system was maintained and currently stands at 6%.

Since 1990, an active policy of negotiating Free Trade Agreements (FTAs) and Economic Complementation Agreements (ECAs) has been pursued as a complement to unilateral liberalisation. This has lowered the average tariff levied by Chile still further, to just 2%, and means that applied tariffs taking account of preferences are typically much lower than the MFN average. A small side effect of these agreements (given such low tariffs) is that they have compromised somewhat the neutrality of the country's tariff system.

Next charts show the agreements signed by Chile and their nature:

SUMMARY CHART

FREE TRADE AGREEMENTS			
COUNTRY OR GROUP OF COUNTRIES	**TYPE OF AGREEMENT**	**SIGNATURE DATE**	**EFFECTIVE DATE**
European Union (2)	Economic Association Agreement	18 November 2002	1 February 2003
P4 (1)	Economic Association Agreement	18 July 2005	8 November 2006
Canada	Free Trade Agreement	5 December 1996	5 July 1997
Central America	Free Trade Agreement	18 October 1999	
China	Free Trade Agreement	18 November 2005	1 October 2006
Colombia	Free Trade Agreement	27 November 2006	Parliamentary proceeding pending
Costa Rica (Chile-Central American FTA)	Free Trade Agreement	18 October 1999	14 February 2002 (Bilateral Protocol)
EFTA (3)	Free Trade Agreement	26 June 2003	1 December 2004
El Salvador (Chile-Central American FTA)	Free Trade Agreement	18 October 1999	3 June 2002 (Bilateral Protocol)
Guatemala (Chile-Central American FTA)	Free Trade Agreement	18 October 1999	Bilateral under negotiation
Honduras (Chile-Central American FTA)	Free Trade Agreement	18 October 1999	Parliamentary proceeding pending
Japan	Free Trade Agreement	27 March 2007	1 September 2007
Korea	Free Trade Agreement	15 February 2003	1 April 2004
Mexico	Free Trade Agreement	17 April 1998	1 August 1999
Nicaragua (Chile-Central American FTA)	Free Trade Agreement	18 October 1999	Bilateral under negotiation
Panama	Free Trade Agreement	27 June 2006	Parliamentary proceeding pending
Peru	Free Trade Agreement	22 August 2006	Parliamentary proceeding pending
United States	Free Trade Agreement	6 June 2003	1 January 2004

SUMMARY CHART			
ECONOMIC COMPLEMENTATION AGREEMENTS			
COUNTRY OR GROUP OF COUNTRIES	**TYPE OF AGREEMENT**	**SIGNATURE DATE**	**EFFECTIVE DATE**
Bolivia	Economic Complementation Agreement Nº 22	6 April 1993	7 July 1993
Ecuador	Economic Complementation Agreement Nº 32	20 December 1994	1 January 1995
Mercosur (4)	Economic Complementation Agreement Nº 35	25 June 1996	1 October 1996
Venezuela	Economic Complementation Agreement Nº 23	2 April 1993	1 July 1993
Cuba	Partial Scope Agreement	21 August 1998 (5)	Parliamentary proceeding pending
India	Partial Scope Agreement	8 March 2006	Parliamentary proceeding pending
.			
(1) Pacific 4 is formed by Brunei Darussalam, Chile, New Zealand, and Singapore.			
(2) The countries that participate as members of the European Union are: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Portugal, Spain, Sweden, the Netherlands, and the United Kingdom. As from May 1, 2004, the new member countries are: Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, and Slovenia. The new members as from January 2007 are: Rumania and Bulgaria.			
(3) The European Free Trade Association (EFTA) is formed by: Iceland, Liechtenstein, Norway and Switzerland.			
(4) Mercosur is formed by Argentina, Brazil, Paraguay and Uruguay. Chile participates as country associated to the Agreement.			
(5) The date refers only to the end of the Negotiations.			

Chilean agriculture

-Geographical and climatic features

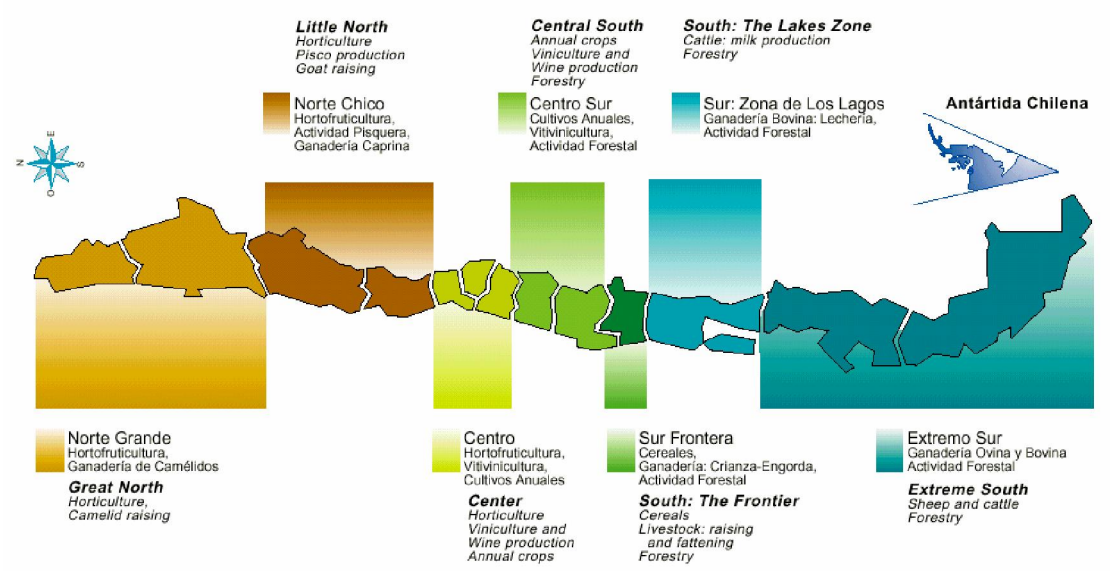
Chile stretches over 4 630 km from north to south along the south-west coast of South America, yet its width never exceeds 430 km. It is flanked on both sides by two large mountain ranges: the Andes Mountain Range and the Costal Mountain Range. Between these two ranges lies the so-called Intermediate Depression. To the east, the high Andean peaks reach up to 6 800 m above sea level, forming a natural border with Bolivia and Argentina.

Chile Map

The country has an area of 76 million ha, of which only approximately one third has some agriculture and forestry potential. This area is divided into the following way:

- 8.5 million hectares: livestock breeding potential
- 11.6 million hectares: forestry potential
- 5.1 million hectares: arable land (1.8 irrigated and 1.3 potentially irrigable; 2.0 of dryland).

Chile's remarkable stretch of latitude, and equally remarkable range of altitudes, is associated with a diversity of climates. From the viewpoint of agriculture and forest production, the country can be divided into 7 macro-regions distinguished by certain climates and geographical features:



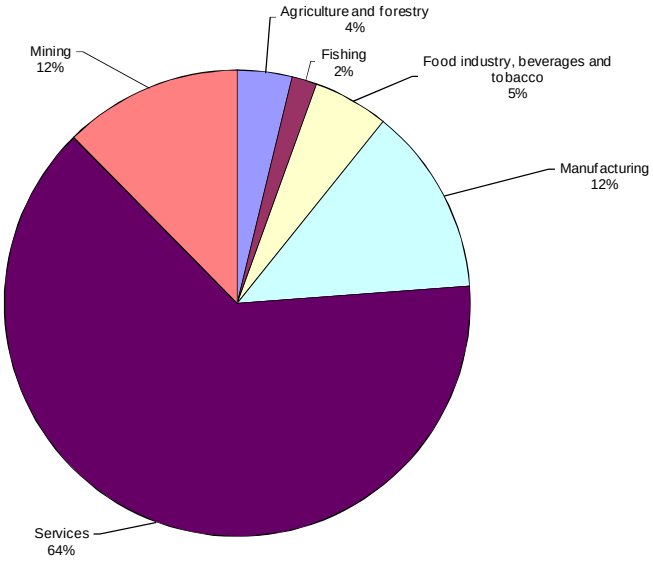
By far the most productive area is in the Central Valley, from south of the Atacama dessert at latitudes from around 33°S to 37°S, and across the intermediate depression between the coastal mountain range and the Andes. This area has a Mediterranean climate of wet winters and warm dry summers, very similar to California.

-Agriculture's role in Chilean economy

The agricultural sector has played a key role in Chile's economic success. For much of the past 20 years, agricultural growth has matched growth in the rest of the economy, enabling the sector's share of national income to remain roughly constant and defying the general experience that agriculture's importance to the economy declines with economic development. Since the mid-1990s, agriculture's share of GDP has declined to just under 4%, a ratio that is lower than the average in countries with similar per capita incomes, but understates the sector's relative importance once the relatively high degree of value added is factored in.[1]

1. The agriculture and agro-food sector's share of GDP is about 9%.

Shares of GDP by sector (2002-2005)



Source: Central Bank of Chile, 2007

Chile's agricultural and agro-industrial sector has been extremely successful in adding value to the production of primary commodities, thus leveraging the benefits of favourable climatic conditions (*e.g.* for high value crops). Processed food products have become the most important sub-sector within the manufacturing sector (ahead of chemicals and non-ferrous metals), accounting for 30% of manufacturing GDP and a similar share of total GDP to agriculture itself. Much of the increase in value added has been in exportable commodities. There has been a huge increase in the sector's export orientation along time and the share of agricultural trade (*i.e.* exports plus imports) in agricultural GDP averages more than 80% since 1999.[2]

Trade.-

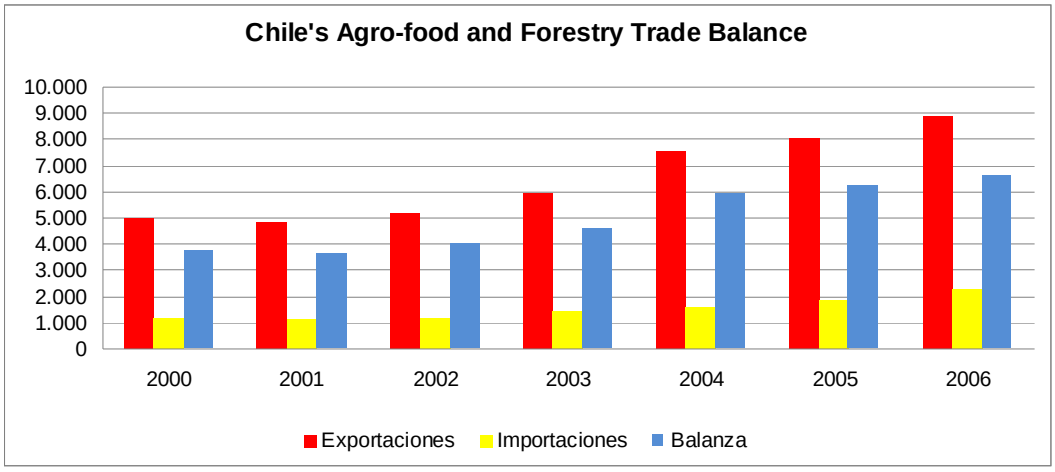
Agriculture makes an important contribution to Chile's overall trade balance, with agro-food exports accounting for 15% of all exports last year (see table below). This share is considerably higher than the cumulative share of agriculture and the food industry in GDP – which has averaged 9% over the past 10 years, or 11% if fisheries are included.

2. These ratios exclude forestry and fisheries.

Chile's agro-food and forestry trade and total trade (2000-2006)

	Value (million US$)						
	2000	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
Total Exports	18.415	17.668	17.676	20.627	31.460	39.247	57.738
Total Imports	16.970	15.288	15.790	16.981	22.454	29.915	34.912
Trade balance	1.446	2.381	1.886	3.647	9.006	9.332	22.825
Agro-food and forestry exports	4.976	4.785	5.185	5.936	7.515	8.043	8.891
Agro-food exports	2.681	2.629	2.878	3.316	3.904	4.175	4.631
Livestock exports	192	266	285	406	600	775	789
Forestry exports	2.103	1.891	2.022	2.214	3.011	3.093	3.471
Agro-food and forestry imports	1.201	1.133	1.203	1.397	1.606	1.836	2.295
Agro-food imports	845	808	874	980	1.111	1.188	1.627
Livestock imports	283	244	246	339	386	519	510
Forestry imports	73	80	83	78	109	129	158
Agro-food and forestry trade balance	3.775	3.653	3.982	4.539	5.908	6.207	6.596
Agro-food balance	1.836	1.821	2.004	2.336	2.793	2.988	3.004
Livestock balance	-91	21	39	67	214	256	279
Forestry balance	2.030	1.810	1.939	2.135	2.901	2.964	3.313

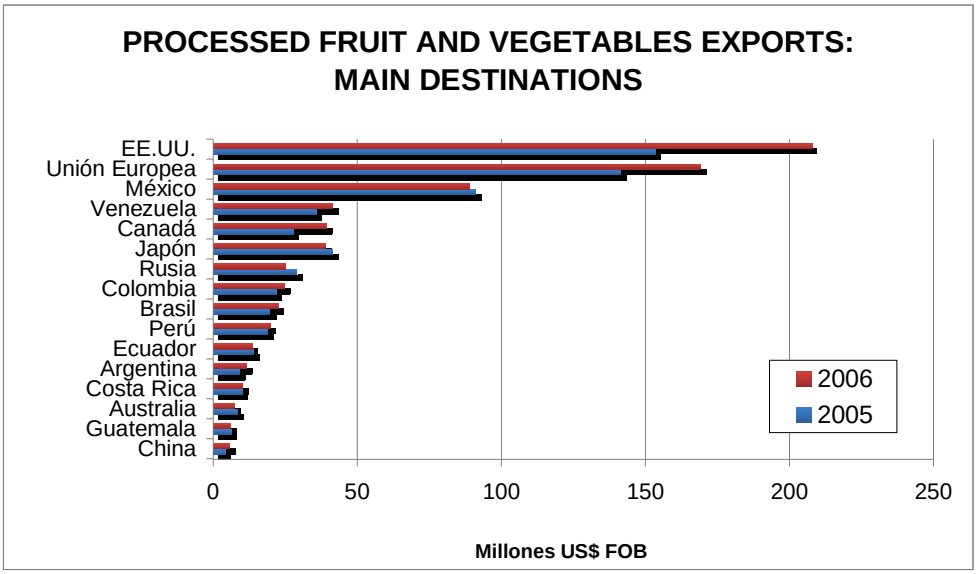
Source: Prepared by ODEPA.



Agro-food exports have grown much more rapidly than agro-food imports in recent years, with the net surplus reaching nearly US$7 billion in 2006. This growth has come from developing new markets abroad and successfully expanding sales of high value items such as fresh fruits, wine and agro-processed foods (including meat of swine and poultry).

Chilean Horticultural Industry

Approximately a share of 52% of fresh fruit production is destined to the processed food industry, which processes raw material to be transformed into canned, dehydrated, frozen products and juices. These products are mostly commercialized at external markets. According to estimates of Chilealimentos and USDA, this share reaches an 86%.



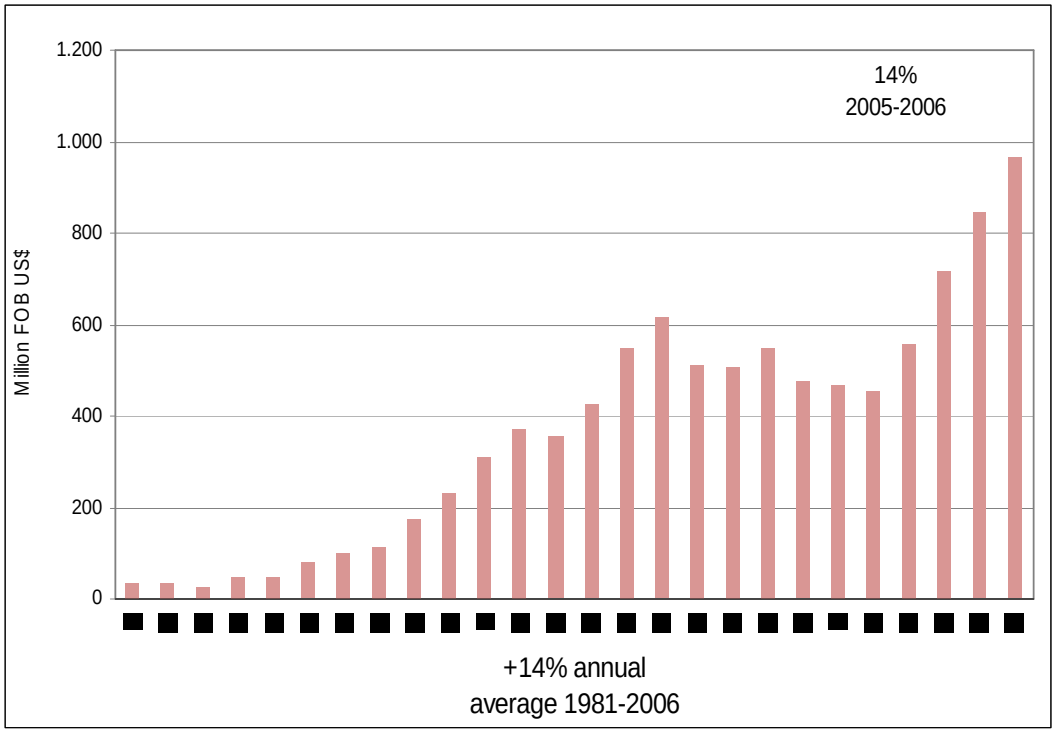
Source: ODEPA.

During the last two decades, exports of processed fruits and vegetables exhibited a significant dynamism, reaching values of US$612 million in 1996, with an average growth of 23% in terms of value and 18% in terms of volume during 1986-96. During 1996-2006 volumes exported grew by an average of 18 % per year and values by an average of 5% per year.

Since 2002 an acceleration occurred (once the Asian economic crisis was overcome) and exports growth averaged 15% in terms of volume and 29 % in terms of value between 2002 and 2006.

Exports reached a record of US$965 million in 2006 and it is expected to continue to grow.

Processed fruits and vegetables exports
1981-2006
(million FOB US$)



Source: Chilealimentos.

In terms of values exported in 2006, canned fruit and vegetables represent 28 % of Chilean horticultural processed exports (million US$ 268); dehydrated products 37% (million US$ 360); frozen products 19 % (million US$ 183); and juices, 16 %.(million US$ 154).

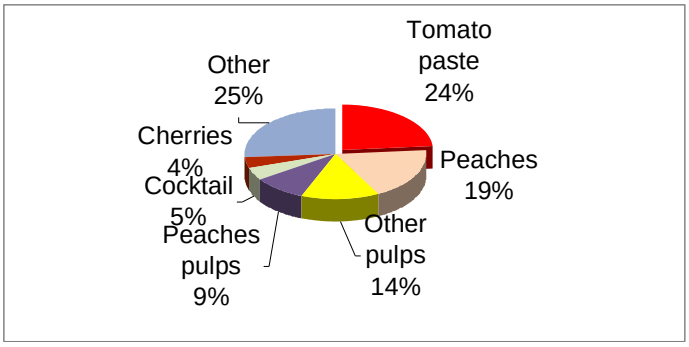
Canned fruits and vegetables

Dealing with international markets, the United States has been traditionally the major market and in 2006 received 20% of shipments. Last years Mexican market has evidenced a significant growth, becoming the second destination for Chilean canned fruits and vegetables. In 2006 Mexico represented a 19 % of Chilean canned fruits and vegetables exports.

It is important to point out that concerning FTAs subscribed by Chile with different countries (e.g. European Union, United States, South Korea, Japan and People's Republic of China) Chilean agro-food products will have free access to those markets only in the period 2010-2015.

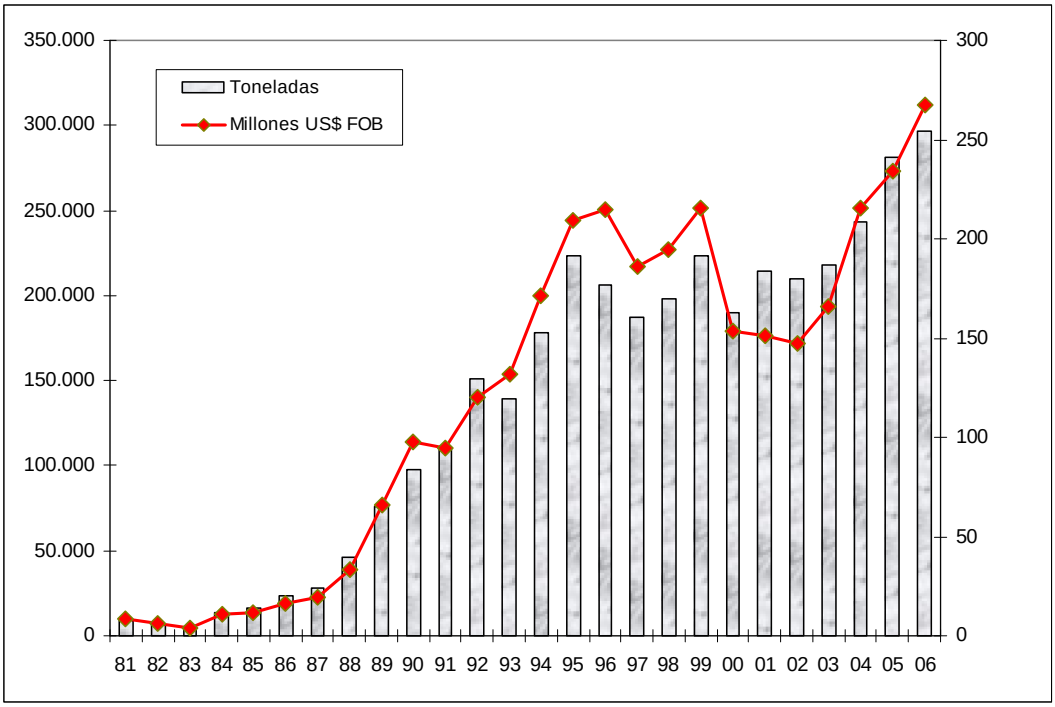
Major canned production corresponds to processed tomatoes and peaches. In 2006 tomato paste and peaches represented 24% and 19% of canned products exports, respectively. Other relevant products are fruit cocktails, cherries and mushrooms.

Canned fruits and vegetables: Exports share by product.



Source: Chilealimentos.

Canned fruits and vegetables exports
1981-2006
(volumes and values)



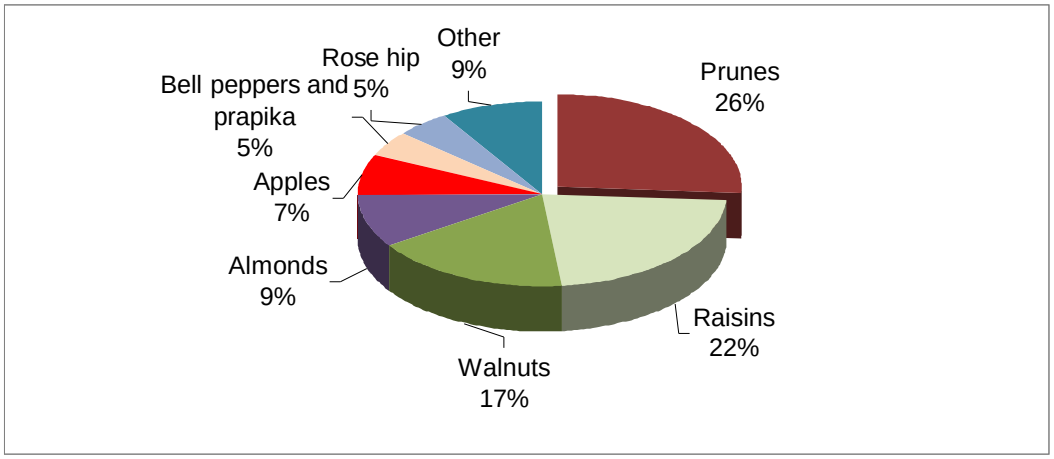
Source: Chilealimentos.

Dehydrated fruits and vegetables

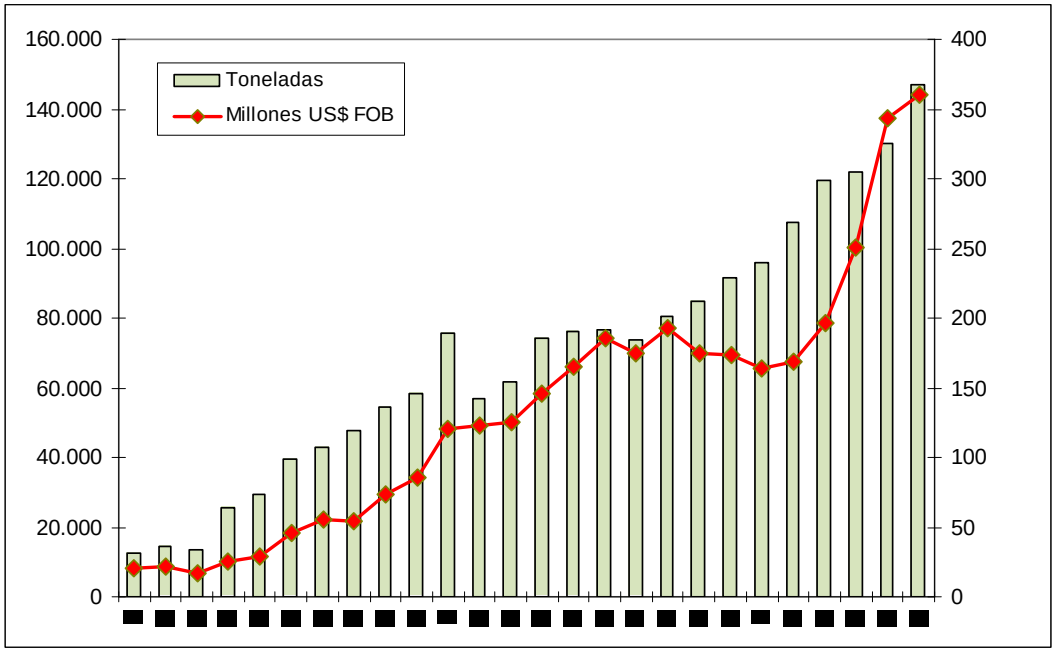
This industry is characterized by exporting a wide range of products, amounting to more than US$360 million in 2006. Regarding dehydrated fruits, the most significant are raisins and prunes; most important dehydrated vegetables are paprika, mushrooms, marjoram and tomato.

Likewise as in canned products, there is an increasing diversification of dehydrated products and about 25% is formed by "others", where dried apples, rosehips and red peppers are included.

Dehydrated fruits and vegetables: Exports share by product.



Dehydrated fruits and vegetables exports
1981-2006
(volumes and values)



Source: Chilealimentos.

Frozen products

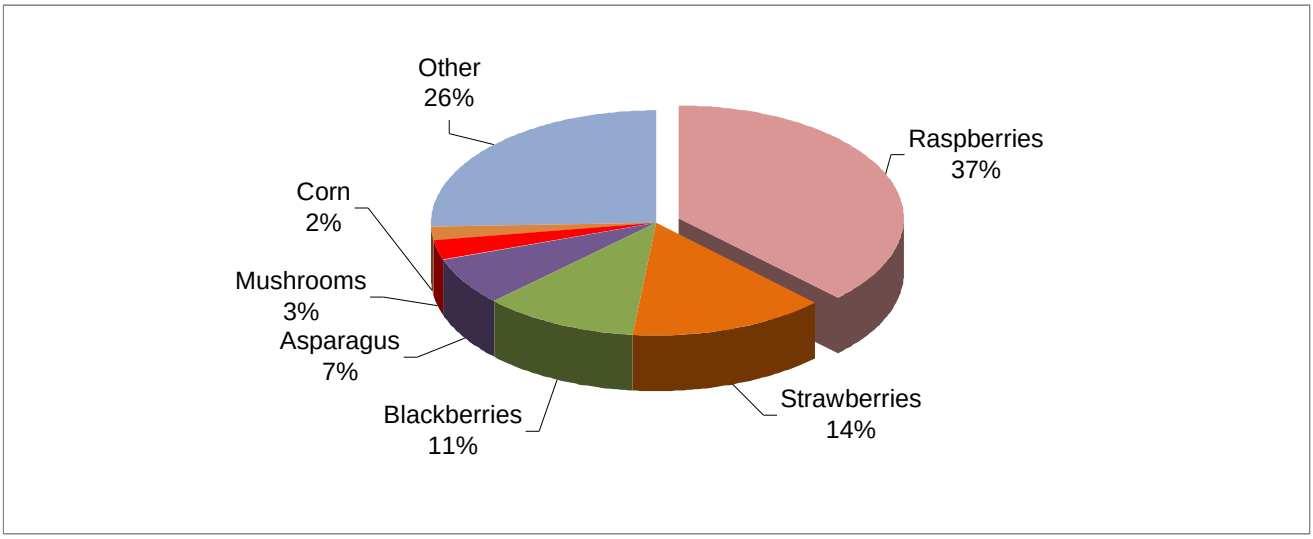
Exports amounted to US$183 million in 2006, where raspberries are the most important, representing about 38% of frozen products exports. Following in importance are strawberries and blackberries, with a share of 14% and 11% in frozen products exports, respectively.

Strawberries have a great potential in the short-term. Exports have increased by 50% last year and demand is likely to continue to grow.

Several frozen products are included as "others", and many of them have also a big potential and are growing fast (specially frozen vegetables).

Food consumption trends have changed and increasingly, consumers have become more convenience-oriented and health conscious, and they expect food to be safe to eat. In this context, consumption world trends privilege this kind of product.

Frozen fruits and vegetables: Exports share by product.



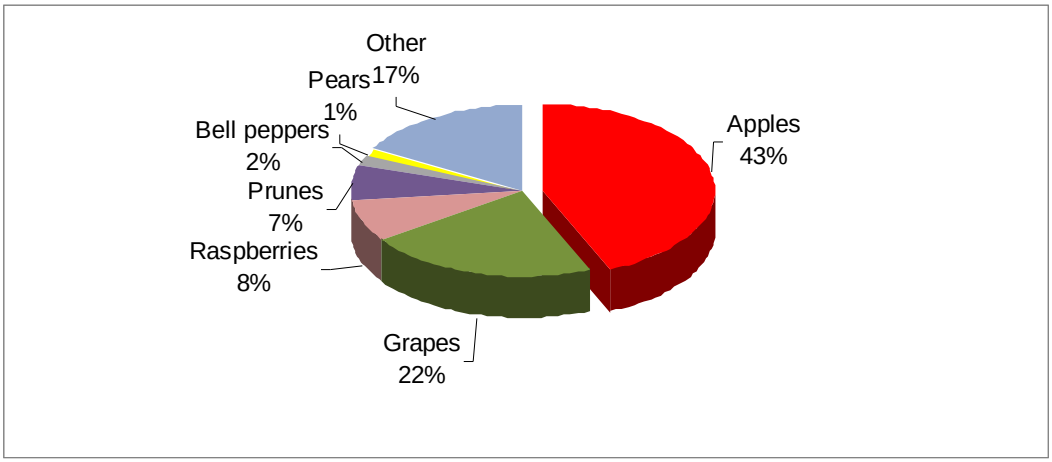
Source: Chilealimentos

Juices

Exports consist mainly of apples and grapes juices, which represent a share of 65% of total juices. Last years an increasing demand for vegetables juices or fruit juice mixed with vegetables has appeared.

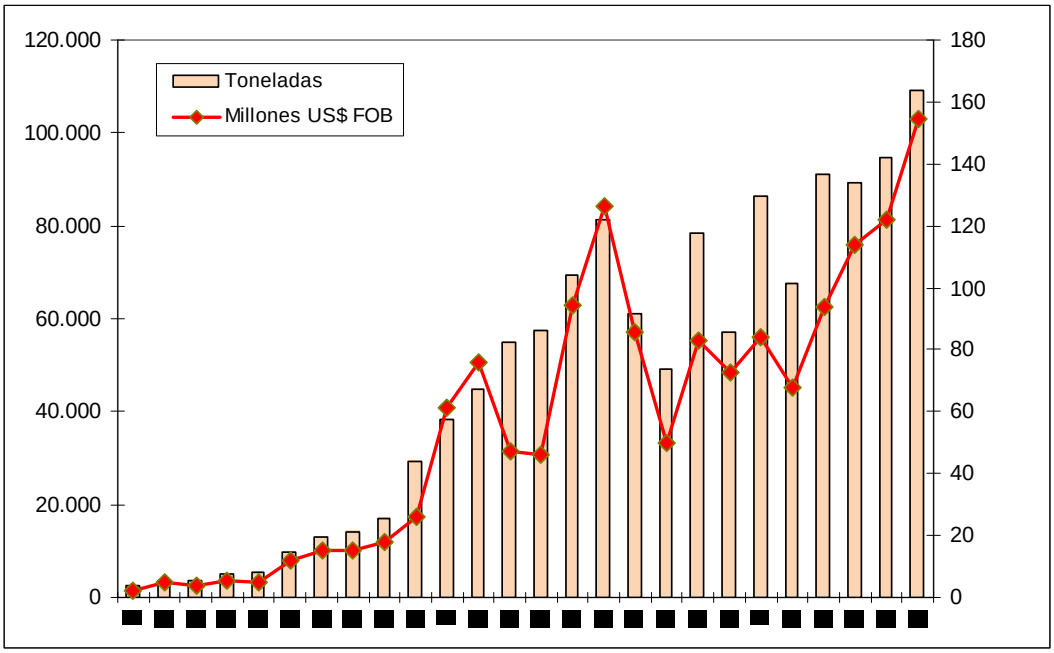
The argument mentioned above is also valid dealing with juices, which demand is expected to increase because of their condition of healthy and safe foods and ready to be consumed.

Juices: Exports share by product.



Source: Chilealimentos.

Juices Exports
1981-2006



Source: Chilealimentos.

Processed fruits and vegetables access conditions into external markets

2007 Tariffs of main agro-food products

Wines with origin denomination					
Country	Exports (thousand FOB US$)			Tariff Reduction Schedule	2007 Effective tariff
	2004	2005	2006		
United Kingdom	142.139	131.886	146.184	Free	0%
United States	104.016	114.442	111.804	D12 (2015)	6,3 cent/lt
Canada	31.862	34.924	40.697	Free	0%
Ireland	36.151	37.274	39.187	Free	0%
Netherlands	28.859	33.695	38.889	Free	0%
Brazil	24.289	26.444	36.149	D15 (2011)	
Germany	36.805	42.426	35.739	Free	0%
Denmark	39.244	35.791	35.486	Free	0%
Mexico	17.391	17.297	24.570	Free	0%
Japan	24.343	22.676	24.534	D12 (2018)	13,8% o 125 yen/lt
Belgium	18.010	21.090	23.753	Free	0%
Russia	9.019	14.479	18.301	-	s/i
Venezuela	8.176	11.716	17.157	Free	0%
Finland	14.635	15.384	16.576	Free	0%
Sweden	13.951	14.812	15.192	Free	0%
France	9.485	8.357	12.229	Free	0%
South Korea	8.404	9.777	11.599	D5 (2009)	4,9%
Colombia	7.078	8.816	9.290	Free	0%
Poland	3.772	5.015	7.714	Free	0%
Switzerland	9.039	7.890	6.965	Free	0%
Letonia	831	1.991	5.445	Free	0%
China	2.360	3.798	4.973	D10 (2015)	16%
Norway	4.596	5.058	4.610	Free	0%
Hong-Kong	2.609	3.531	4.592	-	s/i
Taiwan	2.557	3.741	4.454	-	s/i
Major destinations	**599.620**	**632.309**	**696.090**		
Total	**650.142**	**696.040**	**772.218**		
Share	**92%**	**91%**	**90%**		

Further wines					
Country	Exports (thousand FOB US$)			Tariff Reduction Schedule	2007 Effective tariff
	2004	2005	2006		
United Kingdom	15.301	19.302	16.500	Free	0%
China	17.240	5.187	15.906	D10 (2015)	16%
Germany	18.070	20.208	15.462	Free	0%
Denmark	11.167	13.699	12.863	Free	0%
France	7.755	10.204	7.700	Free	0%
Sweden	10.371	8.422	6.897	Free	0%
Finland	3.753	5.766	6.683	Free	0%
Canada	8.861	9.432	6.108	Free	0%
Russia	831	569	4.998	-	s/i
Norway	4.553	4.318	3.264	Free	0%
Belgium	3.173	3.913	3.222	Free	0%
Netherlands	2.009	2.578	3.090	Free	0%
Venezuela	130	76	1.774	Free	0%
Switzerland	1.469	1.637	1.770	Free	0%
Japan	3.821	2.945	1.625	D12 (2018)	13,8% o 125 yen/lt
United States	1.099	304	913	D12 (2015)	8,4 cent/lt - 22,4 cent/lt
Estonia	812	1.091	807	Free	0%
New Zealand	240	817	645	Free	0%
Czech Republic	1.799	752	583	Free	0%
South Korea	270	648	427	D5 (2009)	4,9%
Major destinations	**112.725**	**111.868**	**111.237**		
Total	**116.190**	**114.172**	**114.317**		
Share	**97%**	**98%**	**97%**		

Dehydrated prunes					
Country	Exports (thousand FOB US$)			Tariff Reduction Schedule	2007 Effective tariff
	2004	2005	2006		
Mexico	11.046	16.784	15.575	Free	0%
Germany	6.733	12.356	15.175	Free	0%
Russia	7.161	7.563	8.571	-	s/i
United Kingdom	2.623	5.935	7.017	Free	0%
United States	520	4.701	5.576	Free	0%
Poland	2.298	3.164	5.266	Free	0%
Italy	1.847	3.448	5.133	Free	0%
Venezuela	1.603	2.862	2.879	Free	0%
Brazil	3.955	2.773	2.679	Free	0%
Sweden	767	1.524	2.322	Free	0%
Belgium	213	1.203	2.177	Free	0%
Colombia	1.377	1.919	2.159	Free	0%
Letonia	487	921	2.147	Free	0%
Netherlands	898	1.176	1.842	Free	0%
Japan	1.028	1.391	1.561	Free	0%
Denmark	528	983	1.382	Free	0%
Peru	1.127	1.354	1.264	Free	0%
Finland	234	876	1.176	Free	0%
Ecuador	505	862	1.070	Free	0%
Major destinations	**44.950**	**71.794**	**84.970**		
Total	**55.160**	**79.817**	**94.838**		
Share	**81%**	**90%**	**90%**		

Frozen Berries					
Country	Exports (thousand FOB US$)			Tariff Reduction Schedule	2007 Effective tariff
	2004	2005	2006		
United States	18.835	28.068	28.995	Free	0%
Canada	6.115	8.839	9.448	Free	0%
France	8.540	7.542	7.901	D7 (2010)	5,4%
Netherlands	6.823	4.770	4.316	D7 (2010)	5,4%
United Kingdom	4.906	3.564	3.798	D7 (2010)	5,4%
Germany	7.419	4.018	3.553	D7 (2010)	5,4%
Australia	3.659	2.878	2.739	-	0%
Japan	1.017	1.426	1.821	Free	0%
Switzerland	1.212	1.375	1.382		
Belgium	2.512	1.241	1.161	D7 (2010)	5,4%
Major destinations	**61.036**	**63.721**	**65.114**		
Total	**64.367**	**67.609**	**68.567**		
Share	**95%**	**94%**	**95%**		

Nectar and Apple Juice					
Country	Exports (thousand FOB US$)			Tariff Reduction Schedule	2007 Effective tariff
	2004	2005	2006		
United States	46.812	39.666	54.083	Free	0%
Japan	5.984	7.796	5.746	R (*)	34% o 23 yen/kg
Canada	1.035	1.060	3.457	Free	0%
Mexico	1.059	1.559	1.871	Free	0%
Major destinations	**54.890**	**50.081**	**65.158**		
Total	**55.312**	**51.023**	**67.404**		
Share	**99%**	**98%**	**97%**		

(*) It will be negotiated the 5th year.

Purée and tomato juice					
Country	Exports (thousand FOB US$)			Tariff Reduction Schedule	2007 Effective tariff
	2004	2005	2006		
Mexico	1.509	8.953	13.931	Free	0%
Venezuela	16.303	11.326	9.878	Free	0%
Costa Rica	6.004	7.341	7.093	Free	0%
Colombia	4.572	3.991	5.617	Free	0%
Japan	6.774	7.267	5.223	D15 (2021)	12,6%
Argentina	950	2.250	3.950	Free	0%
Ecuador	2.734	2.467	2.564	Free	0%
United States	152	938	2.401	D12 (2015)	11,6%
Guatemala	2.522	2.353	2.049	-	5%
Honduras	983	1.350	1.998	-	5%
Uruguay	629	789	1.782	Free	0%
South Korea	1.221	1.045	1.506	Free	0%
Major destinations	**44.353**	**50.070**	**57.992**		
Total	**51.000**	**54.806**	**63.002**		
Share	**87%**	**91%**	**92%**		

Other fruit and vegetable juices					
Country	Exports (thousand FOB US$)			Tariff Reduction Schedule	2007 Effective tariff
	2004	2005	2006		
United States	24.416	28.010	29.626	Free	0%
Japan	2.882	5.312	8.418	D7 (2013)	6,3%
Germany	1.245	2.506	3.225	D7 (2010)	4,39%
Netherlands	1.641	1.881	3.002	D7 (2010)	4,39%
Puerto Rico	0	3.092	2.623	-	s/i
Canada	1.187	962	1.141	Free	0%
United Kingdom	343	411	1.071	D7 (2010)	4,39%
Mexico	262	281	718	Libre	0%
Australia	577	952	433	-	5%
France	0	111	403	D7 (2010)	4,39%
Denmark	0	21	318	D7 (2010)	4,39%
Belgium	0	0	267	D7 (2010)	4,39%
Major destinations	**32.553**	**43.539**	**51.246**		
Total	**33.745**	**45.611**	**52.982**		
Share	**96%**	**95%**	**97%**		

Canned peaches					
Country	Exports (thousand FOB US$)			Tariff Reduction Schedule	2007 Effective tariff
	2004	2005	2006		
Mexico	23.052	23.670	18.193	Free	0%
United States	5.390	4.755	8.648	D12 (2015)	17%
Peru	8.327	7.191	6.600	Free	0%
Colombia	4.688	4.227	4.206	Free	0%
Venezuela	1.706	2.311	3.722	Free	0%
Ecuador	4.436	4.418	3.443	Free	0%
Thailand	1.335	991	1.356	-	s/i
Major destinations	**48.933**	**47.562**	**46.167**		
Total	**53.336**	**52.342**	**50.207**		
Share	**92%**	**91%**	**92%**		

Perspectives.-

To estimate perspectives of the export-oriented horticultural industry, some relevant aspects should be taken into account:
On the one hand, current Government posed a challenge to agricultural sector: to transform Chile into an emerging international agro-food and forestry superpower, that means to be placed within the top ten suppliers in the world.

To address this challenge the Ministry of Agriculture has called a series of experts, academics, entrepreneurs and public officials, and they are working at present to formulate an agro-food agenda identifying the necessary steps to reach said goal.

On the other hand, dealing with demand, world trends in food consumption will introduce more dynamism to demand for these products. Food consumers are health-aware, mindful of nutrition, and enjoying healthier and more balanced diets. They are looking for prepared attractive food as well, because the number of working women is increasing and families are smaller. World population is also increasing, with forecasts of 7,186 million people in 2015, according UN Wider and the World Bank.

Chile is the world's largest exporter of bell peppers and dried apples and South America's largest supplier of tomato paste, raisins, walnuts and almonds. The country still ranks 17th among food exporting countries but by making the necessary efforts both private and public sector, we could leap forward to come up to expectations.

Chilealimentos' estimates suggest Chilean processed fruits and vegetables exports could reach nearly US$1,500 million by the year 2010.

According to the study conducted by ODEPA: "Chilean Agriculture 2014, medium term perspectives", processed fruits and vegetables exports could reach the following values, considering two different hypotheses:

Processed horticultural exports projections

Years	High hypotheses		Low hypotheses	
	Average annual growth rate	Value Million US$ *	Average annual growth rate	Value Million US$ *
2004	-	718	-	718
2009	10%	1,156	7%	1,007
2014	16%	2,428	12%	1,775

Source: ODEPA. (*) 2004 prices.

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