

Pacific Food System Outlook

CHILE

Eugenia Muchnik W.

Professor, Catholic University of Chile

Program Head, Agroindustrial Area,

Fundación Chile

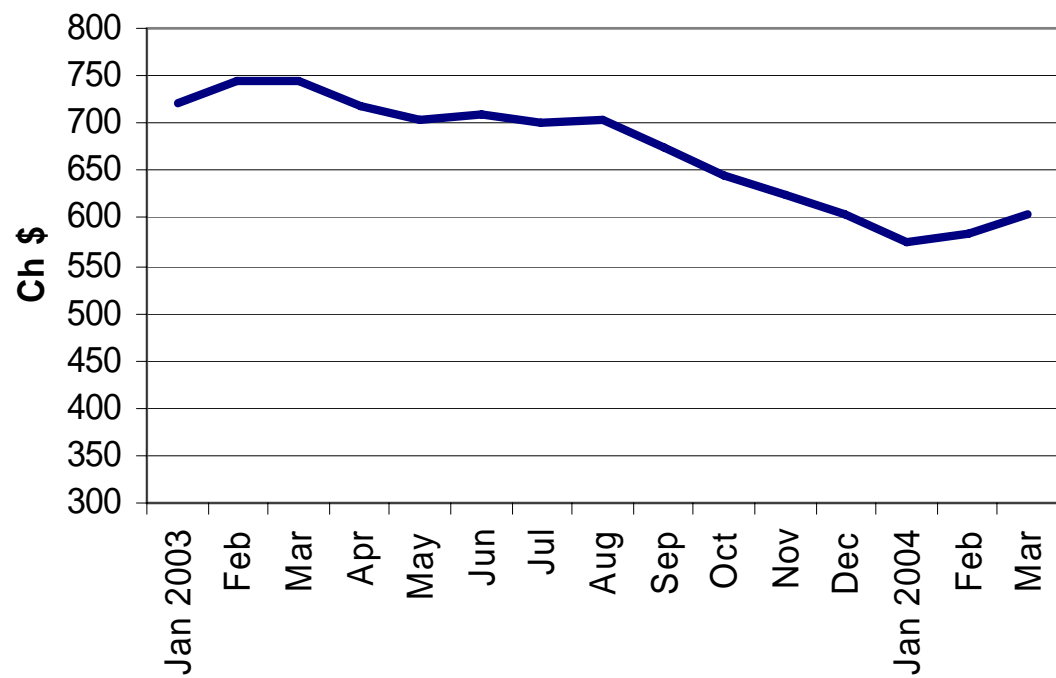
Hanoi, Vietnam; May 17-19, 2004

CHILE: PECC 2004

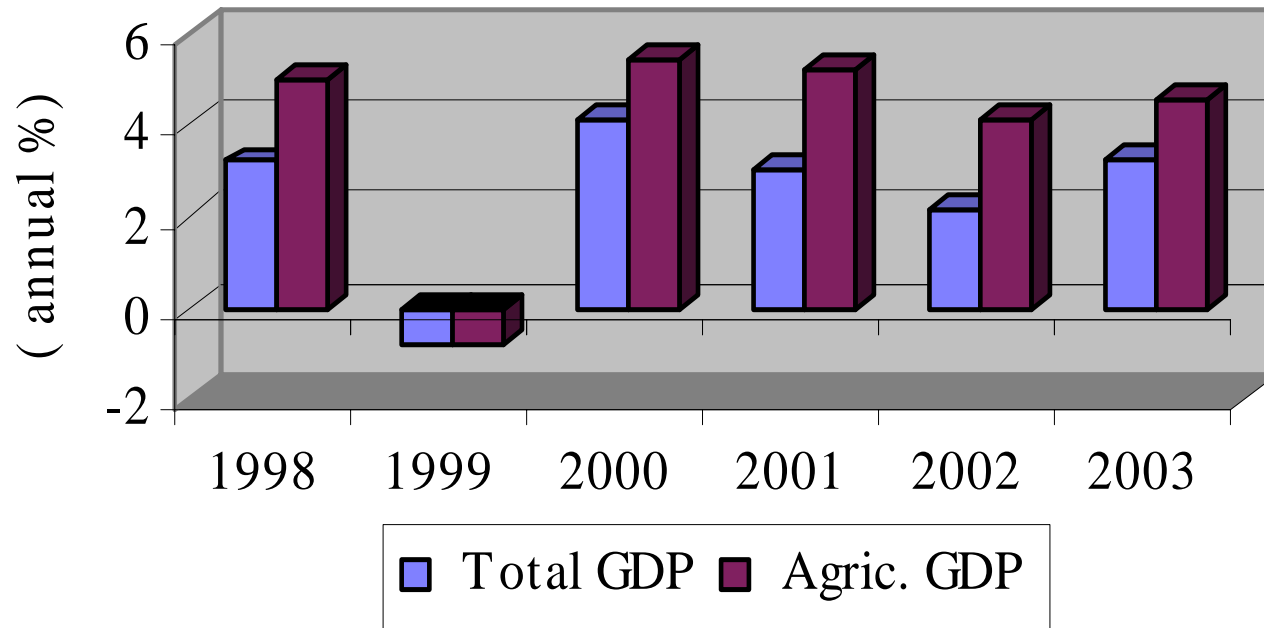
I. Macroeconomics:

- Improvement in 2003 and even better prospects for 2004
- Trade agreements signed finally with USA and South Korea
- Uncertainty from appreciation of the Chilean peso during 2003, which may continue in 2004
- Vulnerability to high energy prices, natural gas shortages, and higher shipping costs

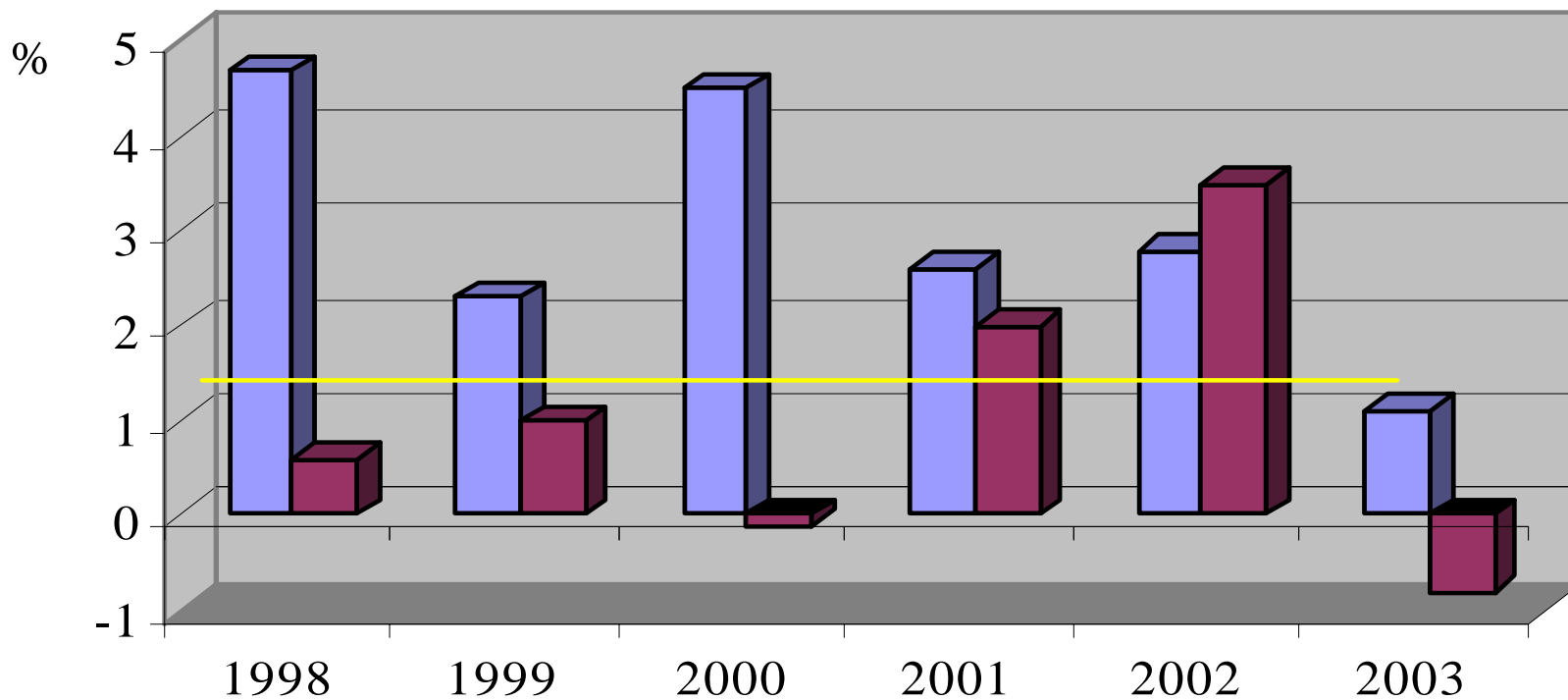
Exchange Rate (Ch\$ / US\$)



Chile: GDP and Agric. GDP Growth Rates

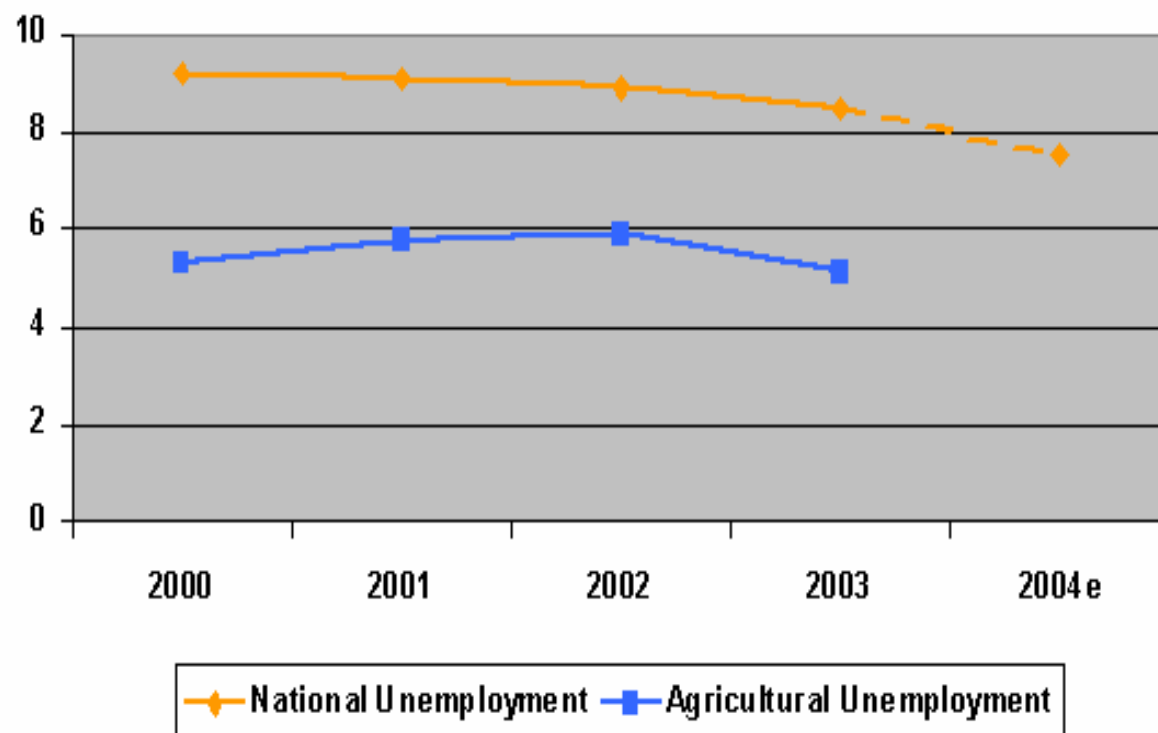


CHILE: Inflation Rate



■ CPI ■ Food CPI

Chile: Unemployment Rate (%)



Source: National Institute of Statistics INE.

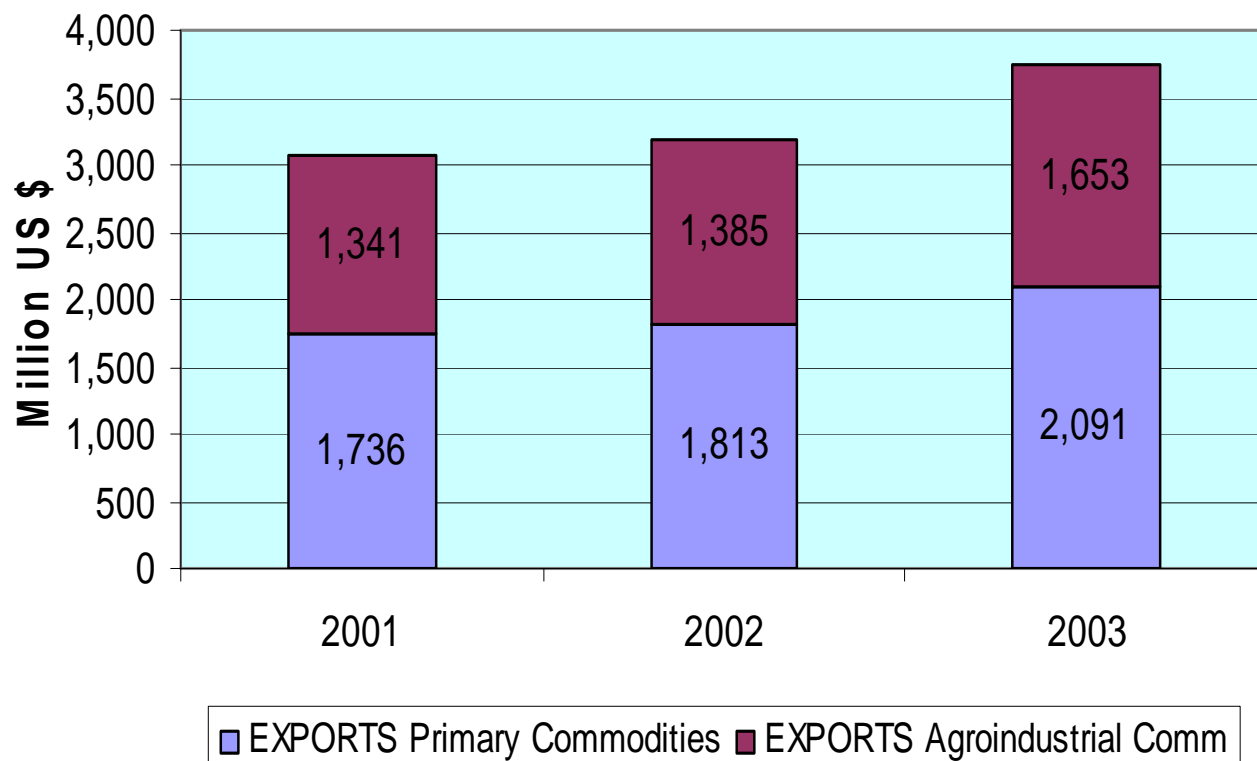
CHILE: PECC 2003

IV. Outlook for Agricultural Production and

Trade:

- **Agricultural GDP growth in 2003: 4.3%, above the average growth of the country for 4th consecutive year**
- **Agricultural exports increased by 15.5% during 2003, and agricultural imports by 12.2%, with a positive trade balance of US \$ 2,205 million dollars**
- **Very good performance of fresh fruits and processed products**
- **Positive results from first year FTA with EU, signed a FTA with USA and Korea after years of negotiations**
- **Favorable prospects for meat exports due to good sanitary conditions and quotas with the FTAs**

Chile: Agricultural Trade



CHILE: PECC 2004

V. Outlook for Agricultural Policy

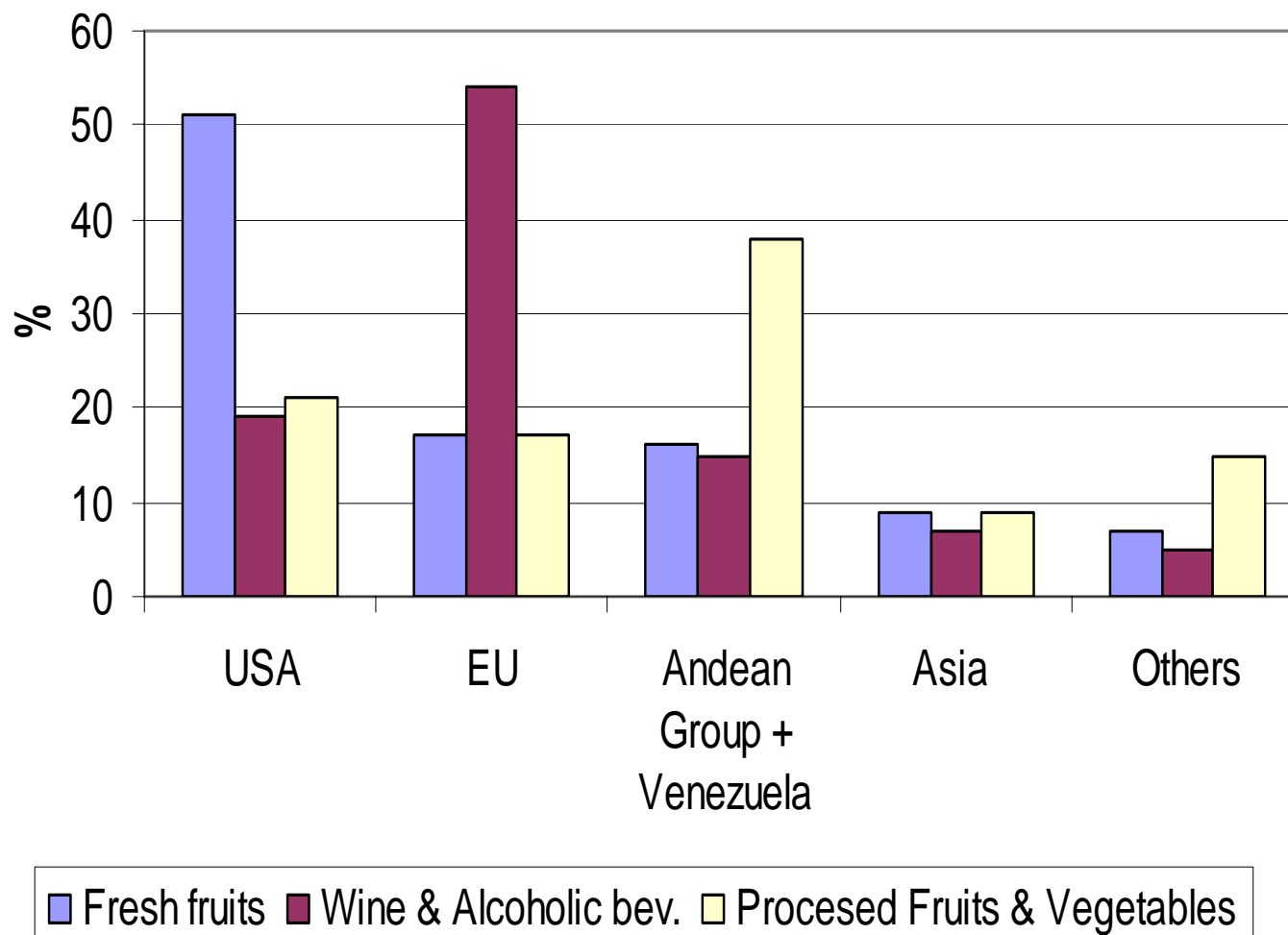
- **Price band system modified in accordance to WTO rules**
- **Continued with a National Plan to facilitate beef and dairy produce exports**
- **Continued to work toward helping the start-up of a commodity exchange of agricultural, forestry, and fish products**
- **Strengthened promotion of “quality” assurance programs and traceability in several food chains**
- **Designed instruments to incorporate SME into the export business**

Infrastructure in Chile and the Food Market

- A. Chile is a **net food exporter** (exports/Ag. **GDP=33%**). Important foreign markets are **USA, Asia, EU, and Latin America**. Main exports are **fruits, vegetables, wines, and salmon**.
- B. **Imports of cereals, beef, and oilseeds** represent an important share of domestic consumption. Important supplier is **MERCOSUR**
- C. Domestic market mainly **urban** (85 %) and highly **concentrated in 2 cities** in the **Central Region** and a third one in the **Central-South Region**
- D. Production of **exportables concentrated in Central Chile** and **import-competing agriculture in the South**

| Chile: Composition of agricultural exports | | |
|--|--|----------------------|
| % | | 2003 |
| 46 | | Fresh fruits |
| 19 | | Wine & alcohols |
| 10 | | Processed fruits |
| 6 | | Meats |
| 3 | | Vegetables and roots |
| 15 | | Others |
| 100 | | Total |

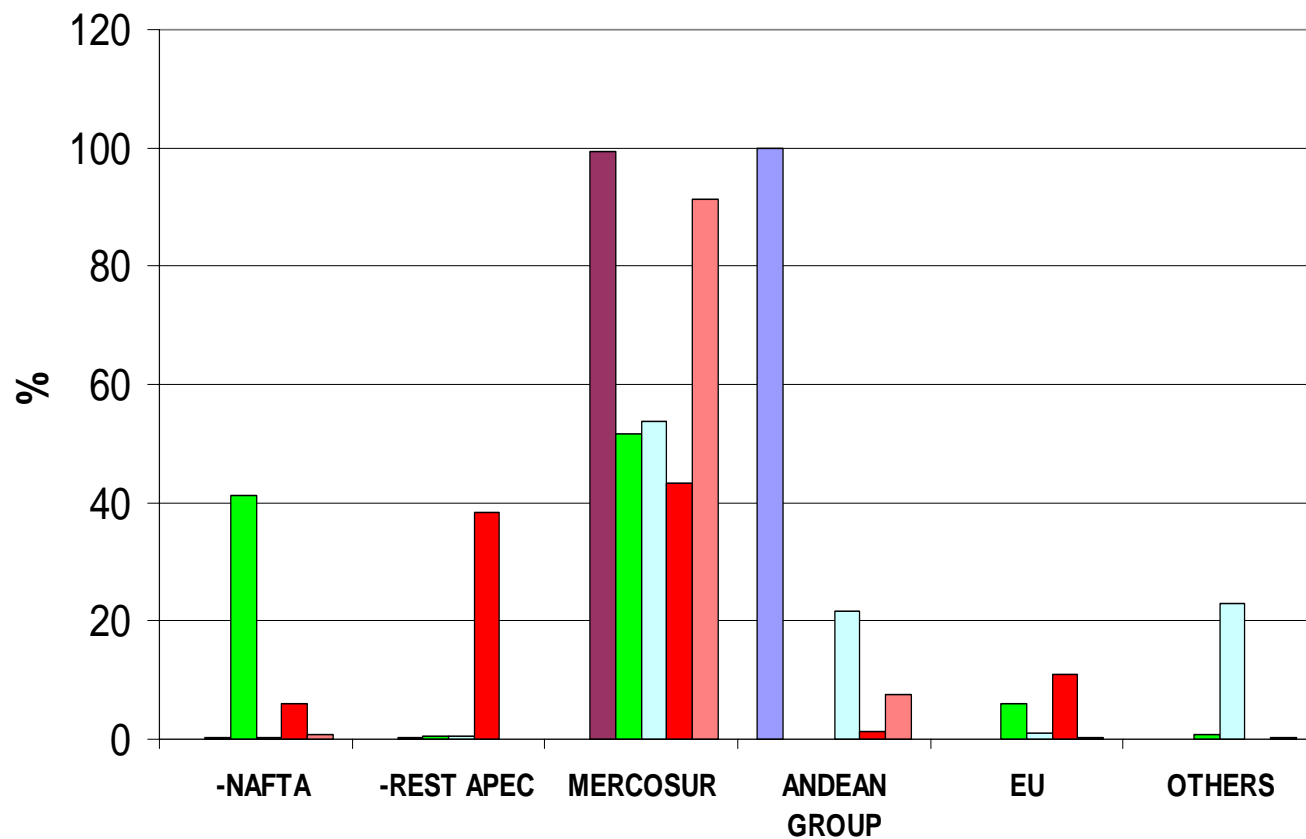
Chile: Destination of main agricultural exports (2000)



| Table 4 Chile: Main Agricultural Imports | | |
|---|------------------|------------|
| Value (Thousand US\$) | | |
| | 2001 | % |
| Cereal | 248.095 | 24 |
| Oilseeds | 142.352 | 14 |
| Fruits | 62.447 | 6 |
| Wine & Alcohols | 39.863 | 4 |
| Dairy products | 35.264 | 3 |
| Others | 236.649 | 22 |
| Meat | 166.969 | 16 |
| Total | 1.052.359 | 100 |

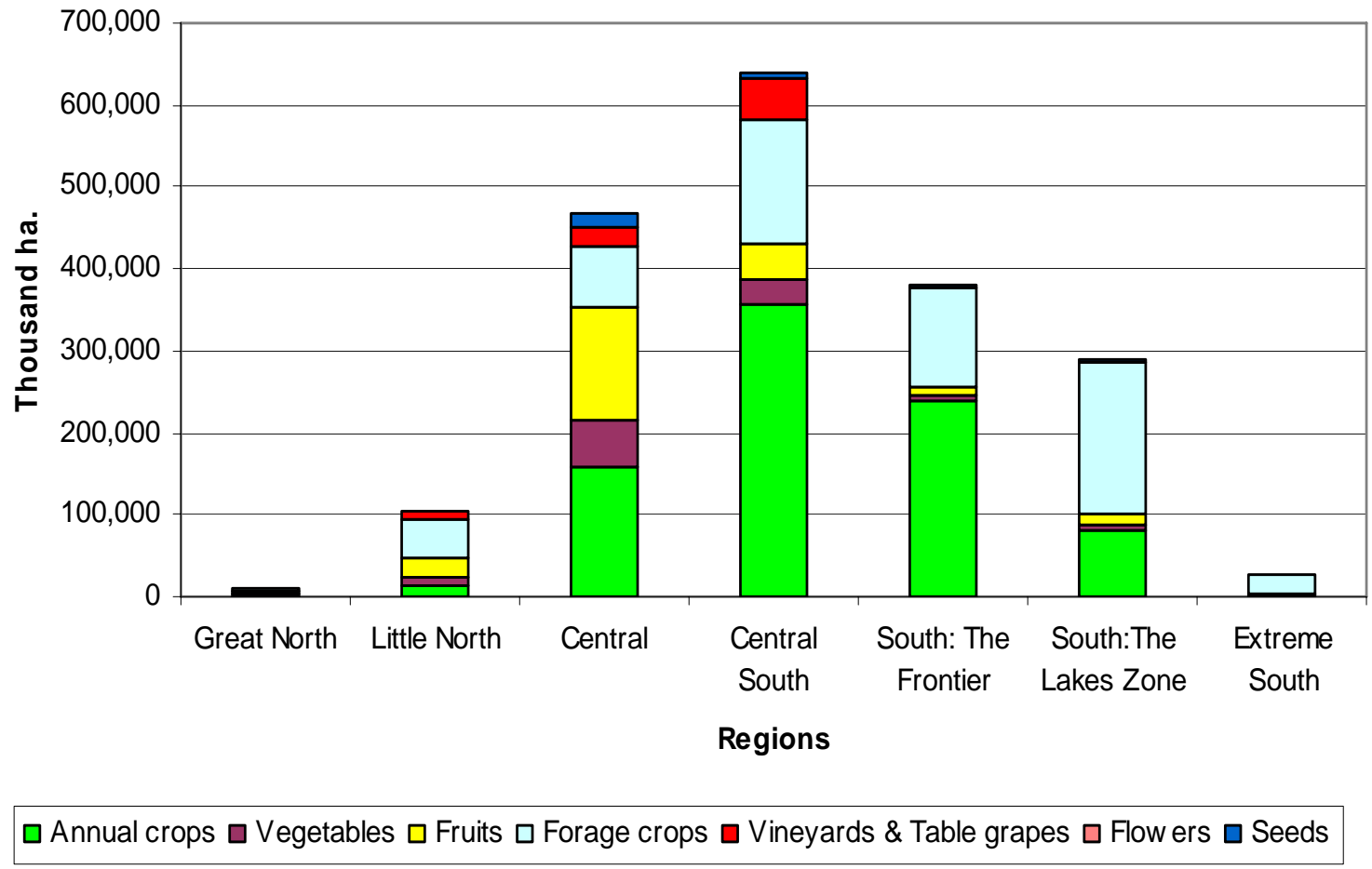
Source: ODEPA. Minagri.(Agrotrade.xls)

Chile: Origin of main imports (2000)

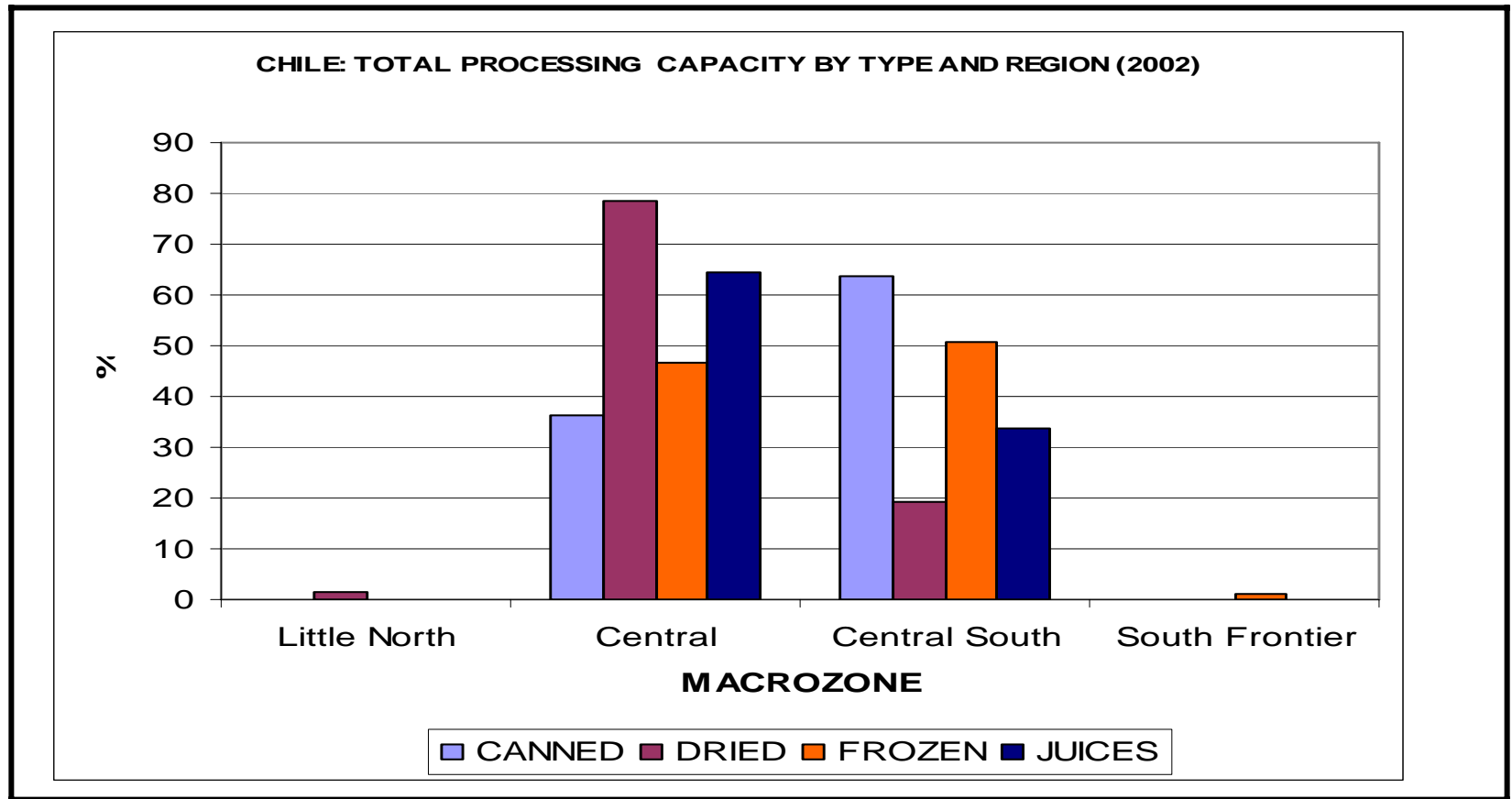


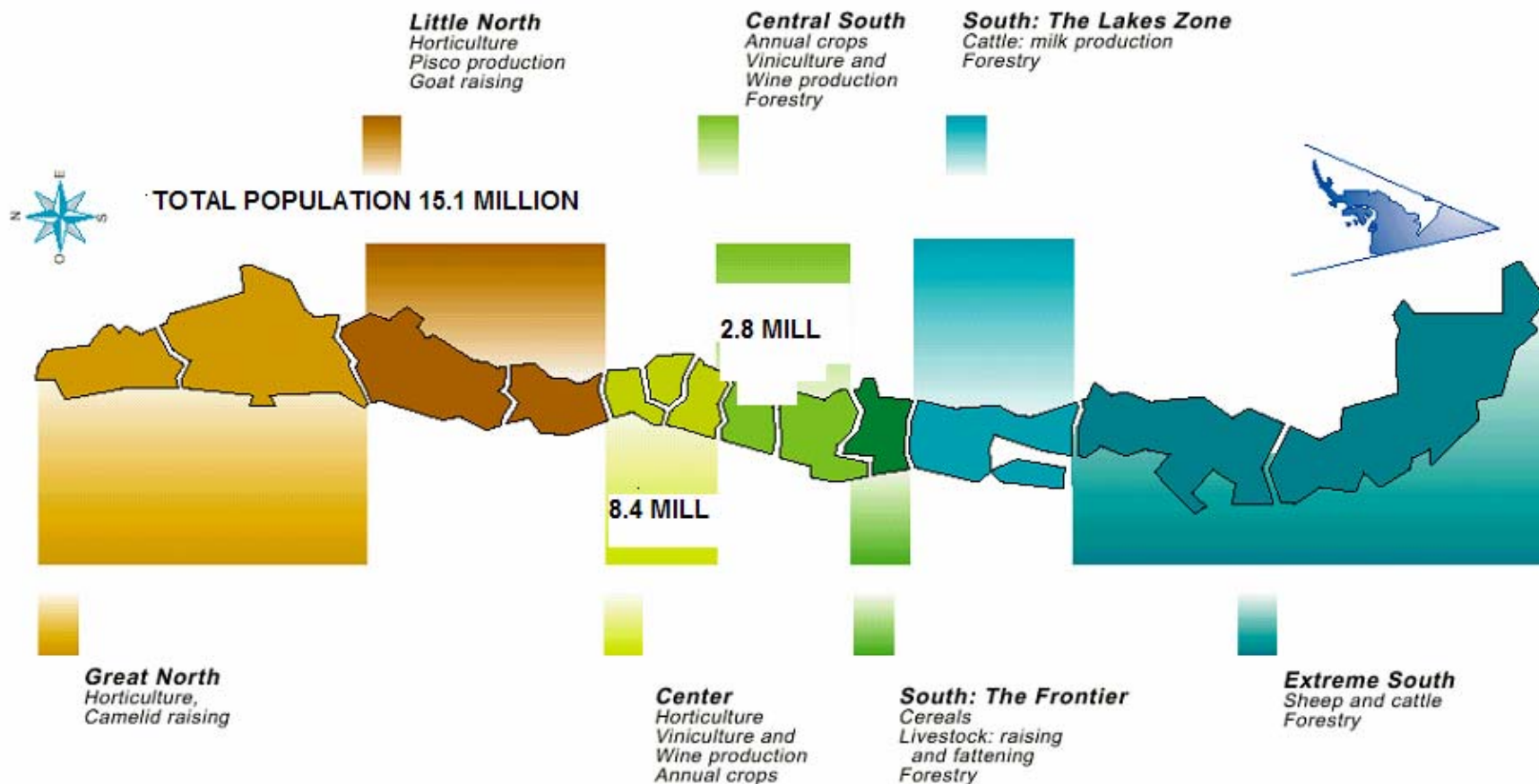
| | | |
|----------------------|------------------|-------------------------|
| ■ Bananas | ■ Bovine meat | ■ Cereals (raw & procs) |
| ■ Sugar, coffee, tea | ■ Dairy products | ■ Oilseeds |

Chile: Composition of Cropped Area by Region



Chile: Number of processing plants for fruits and vegetables by region





Transportation

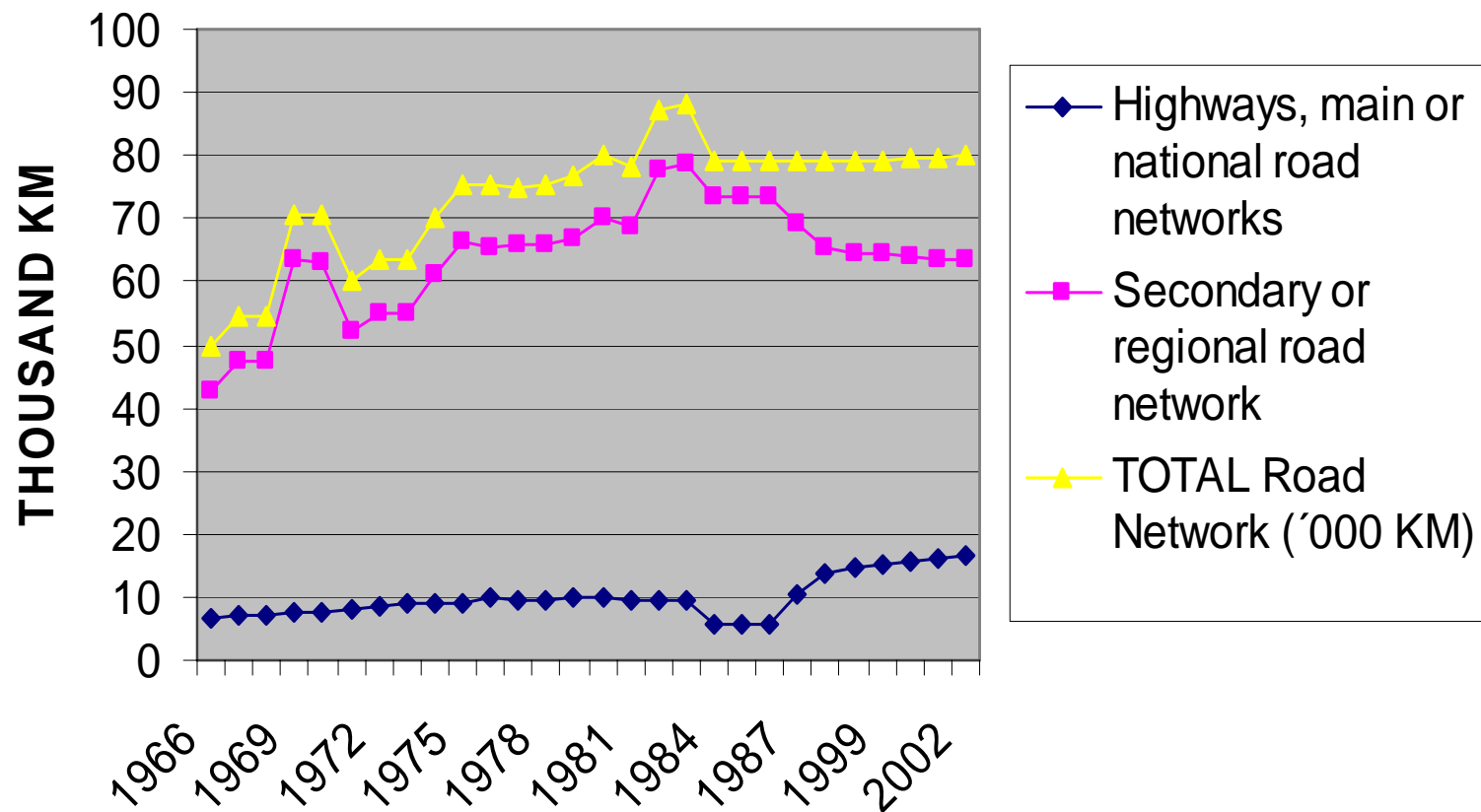
Mobilization of the private sector

Public sector regulation to ensure competitive pricing

Large distances internally and especially to foreign markets

- 1.Domestic, basically by truck to processing plants and consumer centers in the Central Region; good development of cold chain infrastructure and management including retail sales**
- 2. Internationally, first by trucks to ports; and then by marine transportation to NAFTA, EU and Asia, and by road to the closer regional markets such as Mercosur, Peru and Bolivia (bi-oceanic roads)**
- 3. Air transportation for just a few products such as cherries, berries, and cut flowers besides salmon**
- 4. Little use of railways domestically and internationally for food**

CHILE : ROAD NETWORK



CHILE: STOCK OF VEHICLES FOR TRANSPORTATION BY YEAR AND REGION (2002)

| | SIMPLE | TRACTOR | AGRI CULTURE | OTHERS | Towing |
|----------------------------|----------------|----------------|---------------------|------------------------------|-------------------------------------|
| YEAR AND REGION | TRUCK | TRUCK | TRUCK | WITH MOTOR 1/ | semi- Towing Trailer |
| 1999 | 103.427 | 17.412 | 7.659 | 6.055 | 36.998 |
| 2000 | 98.428 | 17.153 | 7.102 | 7.275 | 35.374 |
| 2001 | 96.700 | 18.384 | 7.106 | 9.098 | 38.557 |
| 2002 | 99.662 | 19.152 | 6.932 | 9.494 | 39.418 |

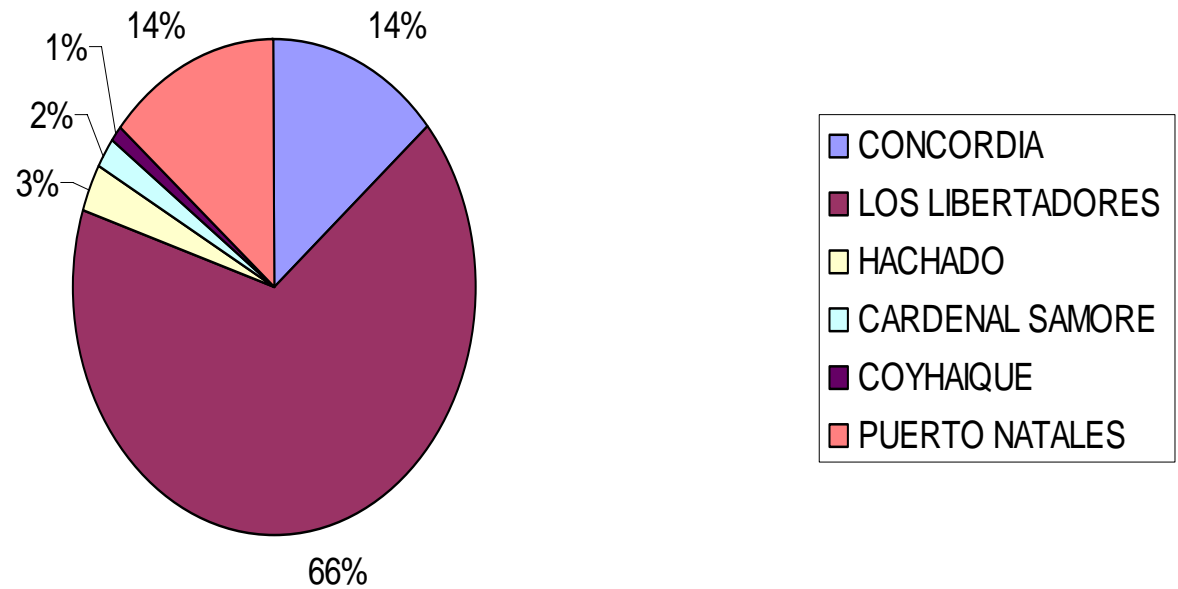
Table 10 Chile: Maritime Ports 2003 (% share by type of product)

| PORT | REGION | IMPORTS | | EXPORTS | |
|--------------|----------------|----------------|------------------------------|---------------------------|-------------------------|
| | | Cereals & oils | Fruits, vegetables & legumes | Fresh fruits & vegetables | Fish & seafood products |
| ARICA | NORTH | 3% | 1% | 1% | |
| IQUIQUE | NORTH | 2% | 2% | | |
| ANTOFAGASTA | NORTH | 1% | | | |
| CALDERA | LITTLE NORTH | | | 3% | |
| COQUIMBO | LITLE NORTH | 1% | | 9% | |
| VENTANAS | CENTRAL | 14% | | | |
| QUINTERO | CENTRAL | 3% | | | |
| VALPARAISO | CENTRAL | | 23% | 63% | 11% |
| SAN ANTONIO | CENTRAL | 71% | 73% | 22% | 28% |
| LIRQUEN | CENTRAL SOUTH | 3% | | | 24% |
| SAN VICENTE | CENTRAL SOUTH | | | | 18% |
| TALCAHUANO | CENTRAL SOUTH | | | | 8% |
| CORONEL | CENTRAL SOUTH | 1% | | | 5% |
| PUNTA ARENAS | SOUTH | | | | 3% |
| TOTAL | | 100% | 100% | 100% | 100% |

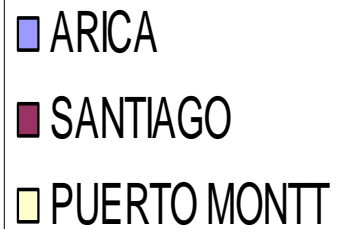
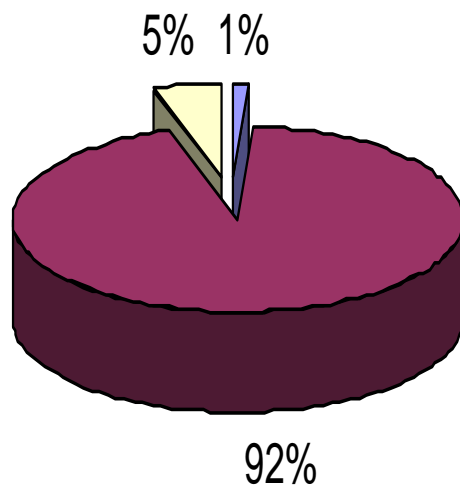
Ports and Docking

- Chile is a maritime nation, and marine transportation is the main means for Chilean exports.
- The ports of San Antonio and Valparaíso are in positions 3 and 4 in terms of transference of containers in Latin America (mobilized 9.3 and 4.7 million tons respectively in 2002).
- San Antonio is privately operated (a factor behind its very high productivity levels), and it has the most advanced technology on the Western Coast of S. America. It has separate terminals to handle transfer of int'l cargo, fractioned cargo, large bulk solids, liquids, with treatment of effluents, and a terminal for handling chemical products (sulfuric acid).

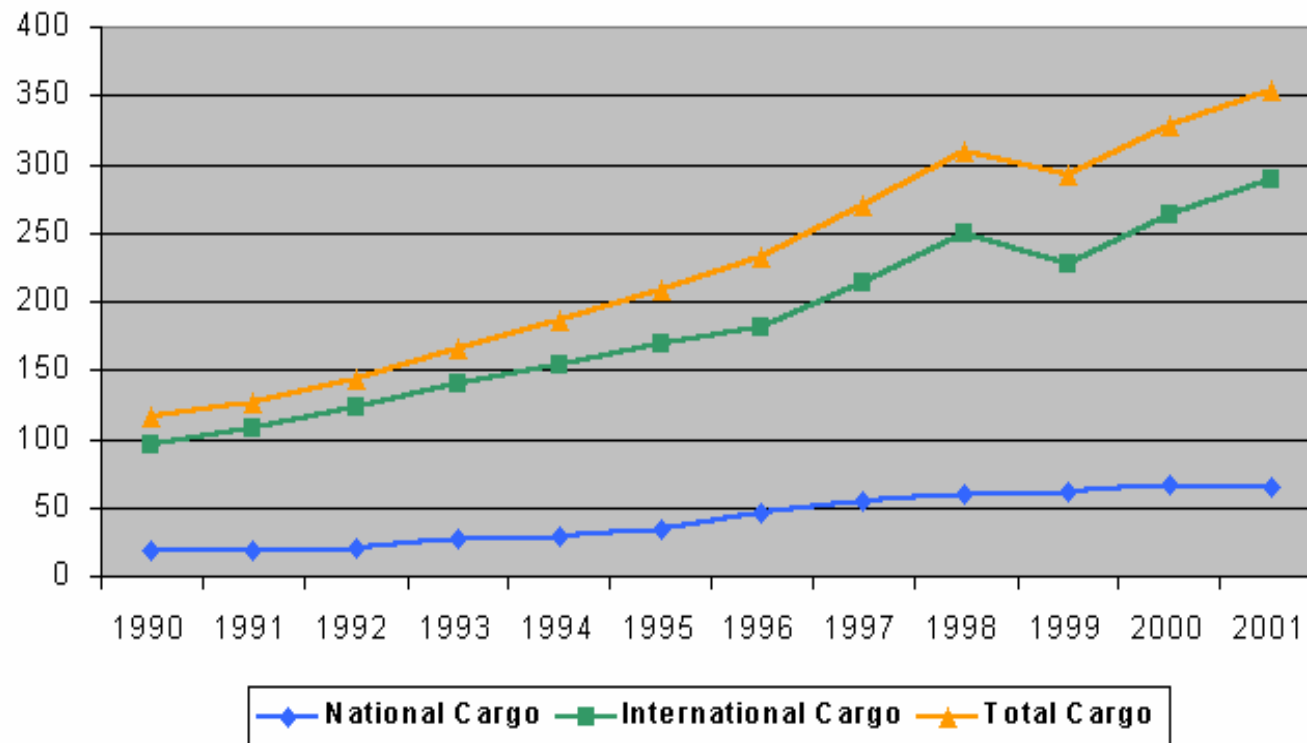
CHILE; CARGO DISTRIBUTION BY INTERNATIONAL ROADS



% OF AIR CARGO BY AIRPORT

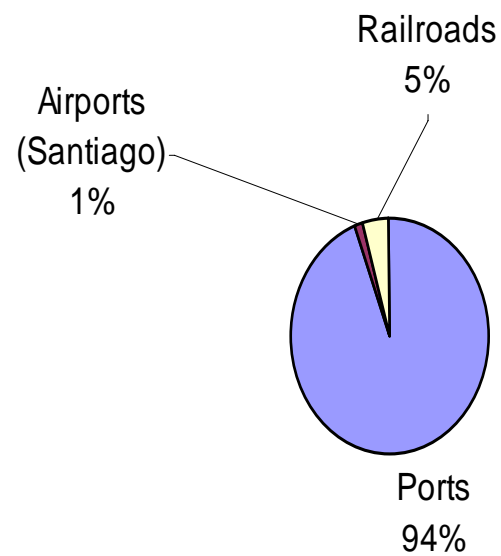


CHILE: Air Cargo (Thousands Tons)



Source: Annual Report 2002 of the Aeronautical Civil Board, J.A.C.

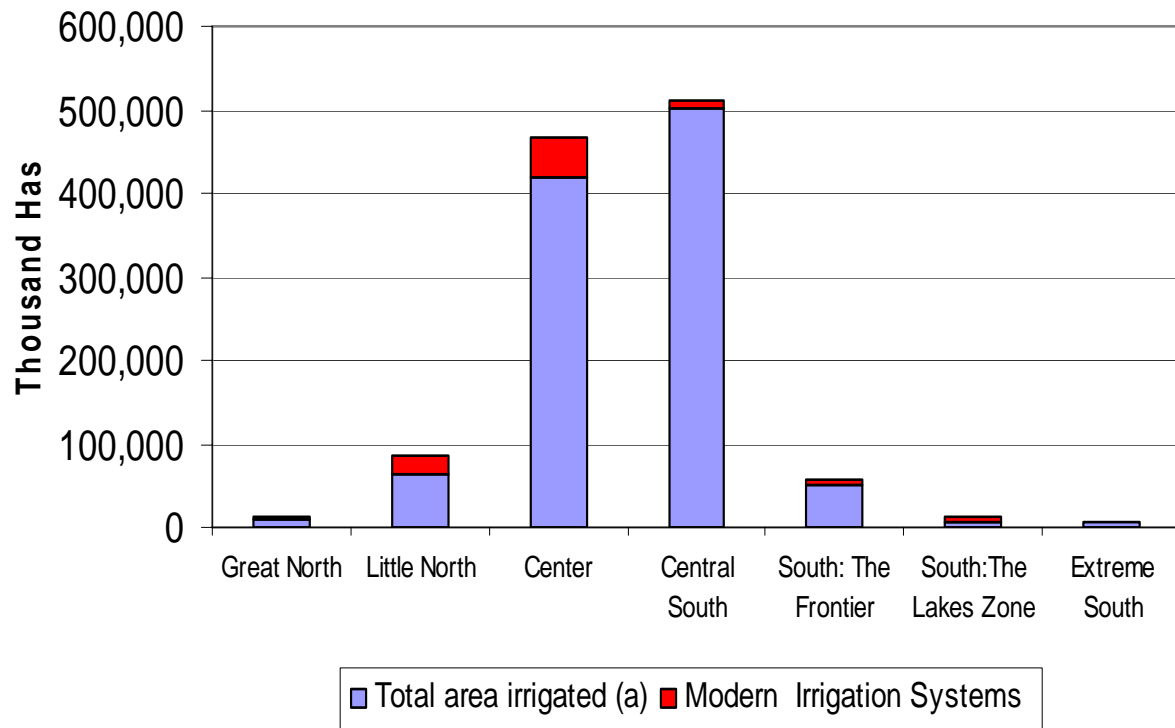
Chile: Fresh fruits exports: main exits 2002- 2003



But the processing capacity for fruits and vegetables needs to be reallocated to remain competitive

- The new irrigation infrastructure requires processing facilities that are not there
- The new “products” require specialized crop production, not the same as for fresh produce
- Agricultural production need not, nor should it now be located as before close to consumption centers, where land and labor have become more expensive
- IT IS A CATCH-22 PROBLEM !!

Chile: Irrigated area 1997, by region



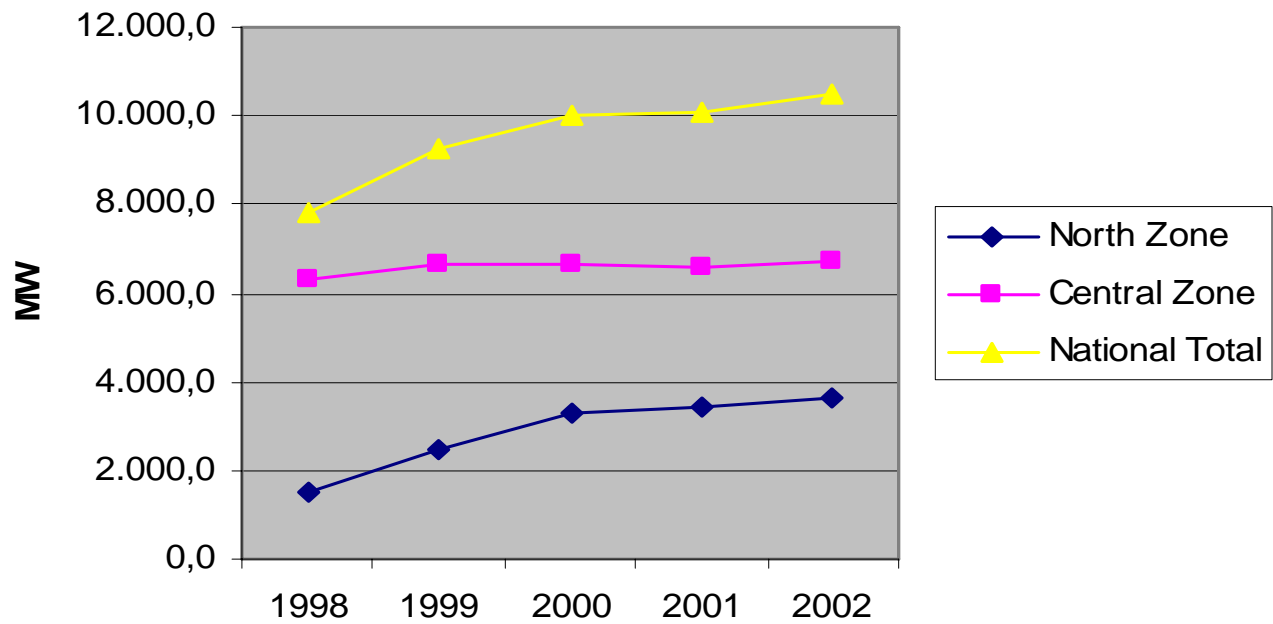
SUMMARY on TRANSPORTATION

- There has been an important improvement in the main longitudinal highways and international bi-oceanic roads. Chile needs to expand investment in E-W roads for agricultural products, but these will not be attractive to private sector
- Still many older trucks in circulation, need for upgrade
- Some problems with places for cargo unloading from Mercosur (fruit fly entry)
- Limitations on international air cargo from regions (monopoly of Chilean airline)
- High dependence on shipping costs, which have recently doubled
- Biotechnology being applied to improve fruit quality at market destination (for example, wooliness, ripeness, color, etc. after many days of low-temperature transportation)
- Important progress in cold chain management and information systems

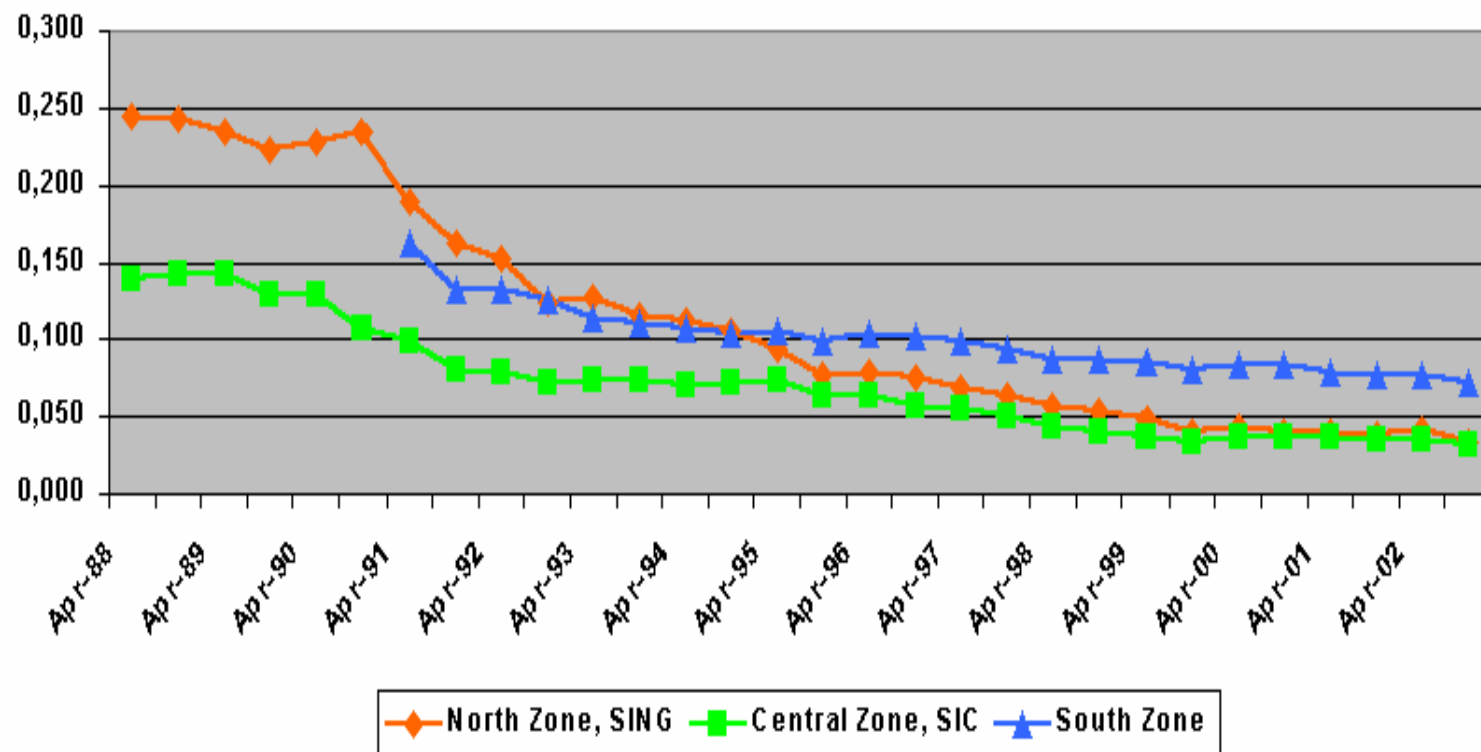
Electricity

- Private sector in generation, transmission, and distribution (31 companies in general, 5 in transmission and 36 in distribution)
- Transmission lines in 2002 reached 16,635 km
- National consumption in 2002 reached about 42,633GWh
- 64% of gross power generation capacity is concentrated in the Central Region, but fastest growth in last years in North (mining)
- 61% is produced by thermoelectric plants and 39 % is produced by hydroelectric plants
- Declining prices, but higher in South (US\$ 0.33 in North, \$0.072 in South)

Chile: Installed Capacity for Electricity Generation

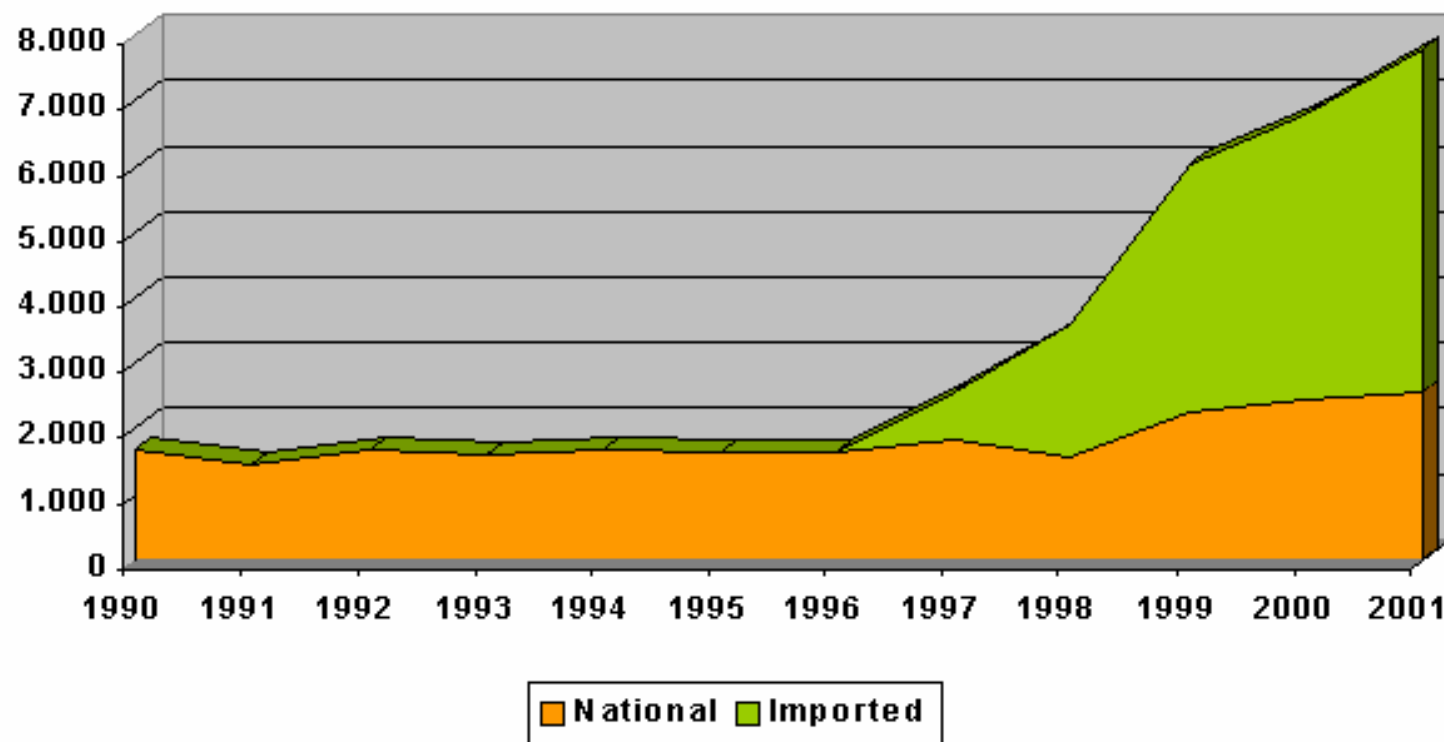


CHILE: Evolution of the Electricity Price for Geographical Zone. (US\$)



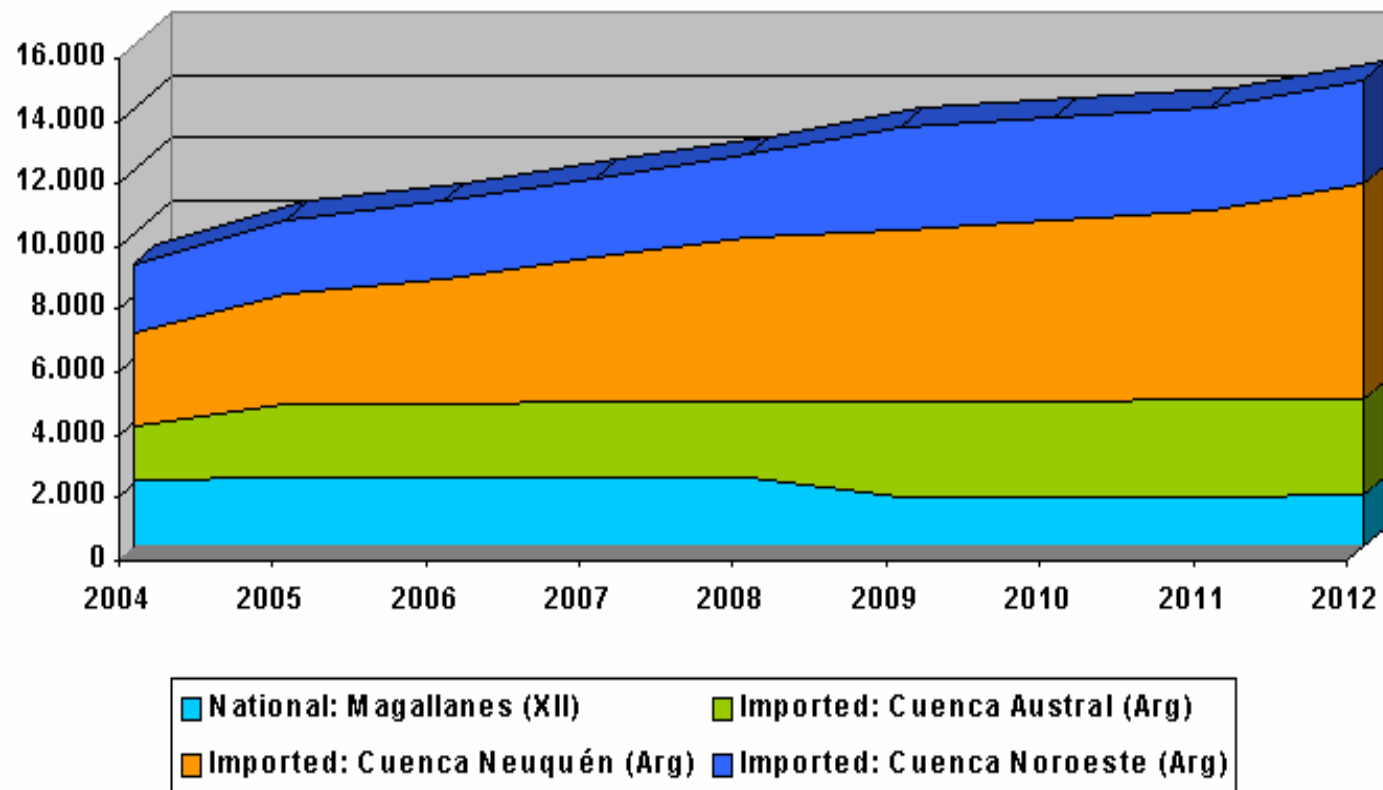
Source: Statistics of Electricity: Price of the Electricity for Electrical System. National Commission of Energy, CNE. Economic statistics: Quote of the observed Dollar, Central Bank of Chile.

CHILE: National Consumption of Natural Gas for Origin (Mill m3)



Source: Hydrocarbons: Secondary Consumption for Origin, National Commission of Energy, CNE.

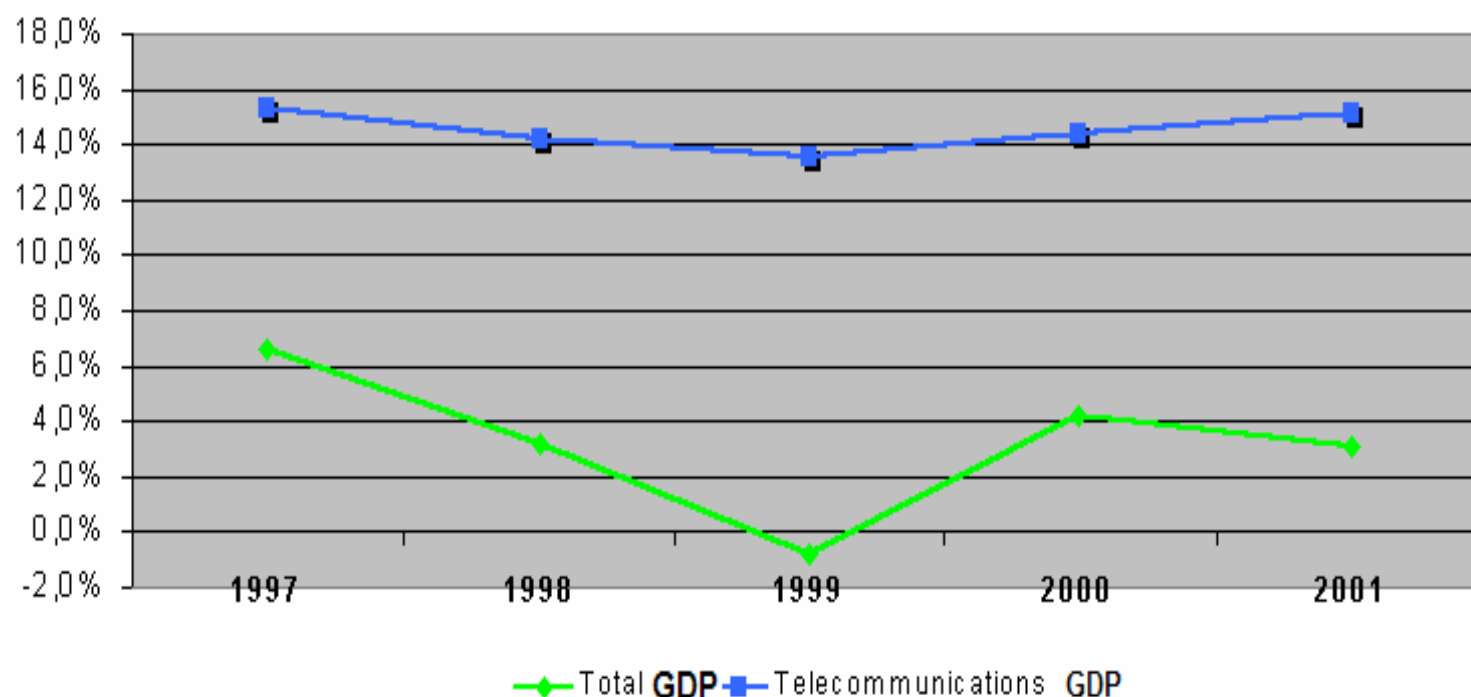
CHILE: Projection Annual Consumption of Natural Gas for Origin (Mill m3)



Source: Hydrocarbons: Projection of Consumption of Natural Gas, 2004-2012. National Commission of Energy, CNE.

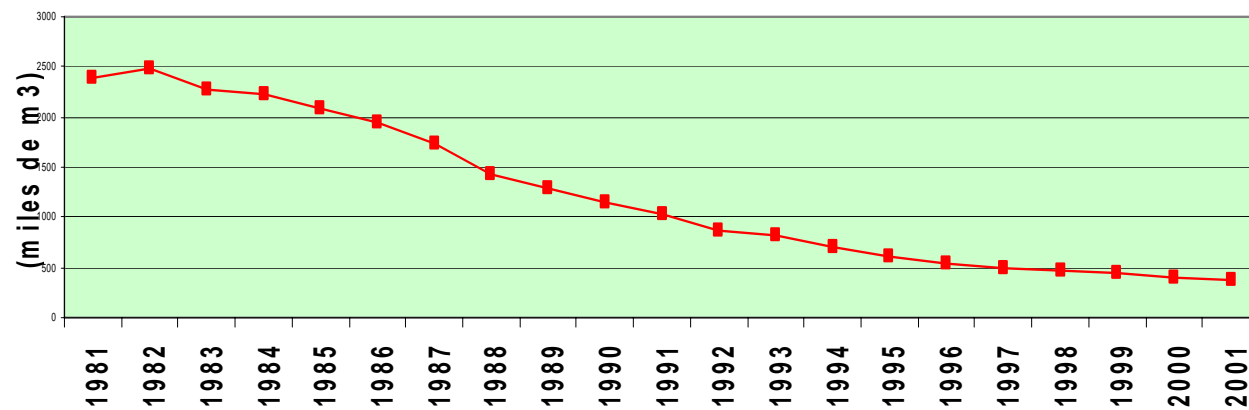
Telecommunications

CHILE: Growth of the Telecommunications Sector (%)



Source: Statistical Report 8. Statistics of the Sector of the Telecommunications in Chile:
2001 - March, 2003. September, 2003. Subsecretary of Telecommunications.

PRODUCCIÓN NACIONAL DE PETRÓLEO CRUDO DESDE 1981



Challenges and Opportunities in Infrastructure

- There is continued improvement in roads domestically and with neighbor countries but still low quality of roads into rural areas more distant from Pan American Highway
- Need to improve stock of trucks, and regulations between neighboring countries
- Problems with sources of natural gas, and acceleration of domestic projects for new hydroelectric power plants
- Need to increase air cargo internally and with international connections from outside Santiago
- Reallocation of food processing plants away from Central Region needed to remain competitive
- Use of railways (?)