

# China Factor and Economic Development of Taiwan

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# Outline

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- I. Introduction
- II. Trade and Investment across the Taiwan Strait
- III. China Factor and Its Impact on Taiwan: GDP Growth and Structure Change
- IV. Economic Cooperation Framework Agreement (ECFA) across the Strait
- V. Conclusion

# I. Introduction

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## **The economic development of Taiwan:**

- High growth rate, low unemployment rate, and low inflation rate
- Small and open economy: trade dependence ratio 118.8 % ( 2008)
- Labor-intensive industries to high technology industries
- emergence of Asian economic integration

## Table 1 Major Economic Indicator of Taiwan

Year	GDP Per Capita (US\$)	GDP Growth Rate (%)	Average GDP Growth Rate (10 year,%)	Unemployment Rate (%)	CPI Growth Rate (%)	Average CPI Growth Rate(%)	Gini coefficient	Foreign reserve (billion US\$)
1970	393	11.4	9.4	1.70	3.60	3.4	0.294	—
1975	978	4.9	—	2.40	5.20	—	0.312	—
1980	2,385	7.8	9.8	1.23	19.00	10.4	0.277	—
1985	3,290	13.5	—	2.91	-0.20	—	0.290	225.6
1990	8,124	3.8	7.7	1.67	4.10	3.1	0.312	724.4
1995	12,918	6.38	—	1.79	3.70	—	0.317	903.1
2000	14,704	5.80	6.2	2.99	1.30	2.6	0.326	1067.4
2001	13,147	-1.65	—	4.57	-0.01	—	0.350	1222.1
2002	13,404	5.26	—	5.17	-0.20	—	0.345	1616.6
2003	13,773	3.67	—	4.99	-0.28	—	0.343	2066.3
2004	15,021	6.19	—	4.44	1.62	—	0.338	2417.4
2005	16,051	4.70	—	4.13	2.30	—	0.340	2532.9
2006	16,491	5.44	—	3.91	0.60	—	0.339	2661.5
2007	17,154	5.98	—	3.91	1.80	—	0.340	2703.0
2008	17,507	0.73	—	4.14	3.53	—	0.341	2917.1
2009	16,442	-1.87	3.2	5.85	-0.87	0.94	—	3482.0

Source: Directorate-General of Budget, Accounting and Statistics, *Statistic Abstract of National Income*, Executive Yuan, Taiwan.

## China factor:

- open door policy (1979)
- number one trade partner of Taiwan
- major source of trade surplus
- number one destination of Taiwan's FDI outflow

## Three major issues:

- Why is bilateral trade across increasing so quickly? Why are there so many Taiwanese firms investing in mainland China?
- How does the China factor affect Taiwan's economy, in terms of GDP growth rate, unemployment rate, and economic structure?
- What is the prospective of economic relationship between Taiwan and mainland China in the future? To what extent that the Asian integration might affect the economic relationship between Taiwan and China?

## II. Trade and Investment across the Taiwan Strait

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- Taiwan's export to China in 2008: US\$74.0 billions  
(41.1%)
- Taiwan's import from China in 2008: US\$31.4 billions  
(14.7%)
- Total trade: US\$105.3 billions (28.9%)
- The annual growth rate of export (1979-2008): 21.5%
- The annual growth rate of import (1979-2008): 14.3%



## Table 2 Bilateral Trade across the Taiwan Strait

Unit: US\$ million

Year	Taiwan to China	China to Taiwan	Total Trade	Taiwan's Surplus from China	Taiwan's Surplus from the World
1979	21.5	56.3	77.8	-34.8	1,329.0
1980	235.0	76.2	311.2	158.8	78.0
1985	986.8	115.9	1,102.7	870.9	10,624.0
1990	4,394.6	765.4	5,160.0	3,629.2	12,495.2
1995	19,433.8	3,091.3	22,525.1	16,342.4	9,330.4
2000	25,009.9	6,229.3	31,239.2	18,780.6	11,217.8
2005	56,271.5	20,093.7	76,365.2	36,177.8	15,817.3
2006	63,332.4	24,783.1	88,115.5	38,549.3	21,319.1
2007	74,245.9	28,015.0	102,260.9	46,230.9	27,425.4
2008	73,977.8	31,391.3	105,369.1	42,586.5	15,180.9
2009					
1-9	43,452.5	16,898.3	60,350.9	26,554.2	15,180.9

Source: Bureau of Foreign Trade, Ministry of Economic Affairs, Taiwan.



### Table 3 Trade Dependence across the Taiwan Strait

Unit: %

	Taiwan			China		
	Export Share	Import Share	Total Trade Share	Export Share	Import Share	Total Trade Share
1979	0.13	0.38	0.25	0.14	0.38	0.26
1980	1.19	0.39	0.79	0.42	1.17	0.82
1985	3.21	0.58	2.17	0.42	2.34	1.58
1990	6.54	1.40	4.23	1.23	8.24	4.47
1995	23.7	4.8	14.6	3.31	20.05	11.19
2000	24.0	6.0	15.2	3.37	15.79	9.27
2005	39.1	12.2	26.2	2.91	11.77	7.02
2006	39.8	13.2	27.2	2.75	11.27	6.58
2007	40.7	13.6	28.0	2.45	10.51	5.99
2008	39.1	13.7	26.8	2.30	8.82	5.19
2009	41.1	14.7	28.9	-	-	-

Source: See Table 2.

The reasons for high growth rate of bilateral trade:

1. comparative advantage:

per capita GDP in 1979: Taiwan US\$ 1,763 China US\$265

in 2008: Taiwan US\$15,313 ChinaUS\$3270

2. trade-creating effect by Taiwan's FDI to China:

- raw materials and intermediate goods
- intra-industrial trade

3. same language and similar culture

Table 4 Major Export Goods from Taiwan to Mainland China (2008)

Unit: US\$ million, %

Rank	HS Code	Description	Amount (US\$ million)	Percentage of Growth rate (%)	Percentage of total Export to the world (%)
1	85	electrical equipment and parts thereof	26,659.0	-7.8	30.6
2	90	optical, photographic Instruments, parts and accessories thereof	13,154.5	13.5	61.3
3	39	plastics and articles thereof	6,542.2	-2.7	38.1
4	84	mechanical appliances; parts thereof	5,087.2	-12.9	18.7
5	29	organic chemicals	4,677.5	12.4	44.2
6	72	iron and steel	2,296.9	-13.3	20.0
7	74	copper and articles thereof	2,245.7	-15.6	55.9
8	27	mineral fuels	2,086.8	194.0	11.2
9	54	man-made filaments	1,086.7	-9.5	32.7
10	38	miscellaneous chemical products	681.0	-0.1	29.2
Total			64,517.5	-1.0	

Source: Mainland Affairs Council, Cross-Strait Economic Statistics Monthly, (December 2008), Executive Yuan, Taiwan

Note: 1. The HS Coding has been applied since June 1995.

2. Growth rate is the year-on-year growth rate.

3. The figures are not added up to the total due to rounding up.

## Table 5 Major Import Goods from Taiwan to Mainland China (2008)

Unit: US\$ million, %

Rank	HS Code	Description	Amount (US\$ million)	Percentage of Growth rate (%)	Percentage of total Export to the world (%)
1	85	electrical equipment and parts thereof	9,804.3	4.0	20.8
2	84	mechanical appliances; parts thereof	4,772.3	13.8	20.4
3	72	iron and steel	2,293.3	14.1	15.3
4	27	mineral fuels, mineral oils and products of their distillation	2,069.7	48.7	3.3
5	90	optical, photographic, cinematographic instruments; parts and accessories thereof	1,762.3	12.6	17.0
6	38	Miscellaneous chemical products	1,251.0	85.9	18.2
7	29	organic chemicals	907.1	13.2	9.0
8	39	plastics and articles thereof	647.6	5.5	10.9
9	87	Vehicles, parts and accessories thereof	642.4	43.6	19.8
10	25	Earths and stone, lime and cement	581.0	34.7	48.1
Total			24,731.0	14.7	

Source: See Table 4.

Note: 1. Growth rate is the year-on-year growth rate.

2. The figures are not added up to the total due to rounding up.

## The Reasons for Taiwan's FDI to mainland China

1. New Taiwan dollar appreciation  
(by 30 % from 1985 to 87)
2. abolished martial law (1987/11)
3. comparative advantage
  - labor-intensive industries
  - export-oriented industries
4. Same language and similar culture

## Table 6 Taiwan's FDI to China

Units: US\$ million

Year	Taiwan's Record <sup>(a)</sup>			China's Record <sup>(b)</sup>				
	Cases	Amount	Average Amount	Projects	Contracted Amount	Average Amount	Realized Amount	Realization Ratio (%)
1991	237	174.16	0.73	3,446	2,783.00	0.81	844.00	30.33
1992	264	246.99	0.94	6,430	5,543.00	0.86	1,050.00	18.94
1993	1,262 (8,067) <sup>(c)</sup>	1,140.37 (2028.05)	0.90 (0.25)	10,948	9,965.00	0.91	3,139.00	31.50
1994	934	962.21	1.03	6,247	5,395.00	0.86	3,391.00	62.85
1995	490	1,092.71	2.23	4,778	5,777.00	1.21	3,162.00	54.73
1996	383	1,229.24	3.21	3,184	5,141.00	1.61	3,475.00	67.59
1997	728 (7997)	1,614.54 (2719.77)	2.22 (0.34)	3,014	2,814.00	0.93	3,289.00	116.88
1998	641 (643)	1,519.21 (515.41)	2.37 (0.80)	2,970	2,982.00	1.00	2,915.00	97.75
1999	488	1,252.78	2.57	2,499	3,374.44	1.35	2,598.70	77.01
2000	840	2,607.14	3.1	3,108	4,041.89	1.30	2,296.28	56.81
2001	1,186	2,784.15	2.35	4,214	6,914.19	1.64	2,979.94	43.10
2002	1,490 (3950)	3,858.76 (2864.30)	2.59 (0.73)	4,853	6,740.84	1.39	3,970.64	58.90
2003	1,837 (8,268)	4,594.99 (3,103.80)	2.50 (0.38)	4,495	8,557.87	1.90	3,377.24	39.46
2004	2,004	6,940.66	3.46	4,002	9,305.94	2.33	3,117.49	33.50
2005	1297	6,006.95	4.63	3,907	10,358.25	2.65	2,151.71	20.77
2006	1090	7642.34	7.01	3752	-	-	2135.83	-
2007	996	9970.55	10.01	3299	-	-	1868.45	-
2008	643	10691.39	16.63	2360	-	-	1898.68	-
<b>Total</b>	<b>37181</b>	<b>75560.46</b>	<b>2.03</b>	<b>77506</b>	<b>-</b>	<b>-</b>	<b>47659.68</b>	<b>-</b>

Source: see Table 4.

Notes: (a) Data published by Taiwan government – Investment Commission, Ministry of Economic Affairs, R.O.C.

(b) Data published by China government – Ministry of Commerce, PRC.

(c) The figures in the parentheses represent the cases or amount for registration of previously unregistered investments.



# III. China Factor and Its Impact on Taiwan: GDP Growth and Structure Change

## Impact on GDP:

Table 7 GDP Contribution of Taiwan by Bilateral Trade across the Taiwan Strait

Unit: %

year	Taiwan's GDP Growth Rate (1)	contribution of bilateral trade with China on Taiwan's GDP growth rate in points <sup>(a)</sup> (2)	contribution of bilateral trade with China and Hong Kong on Taiwan's GDP growth rate in points (3)	contribution of bilateral trade with China on Taiwan's GDP growth rate in percentage (4)=(2)/(1)	contribution of bilateral trade with China and Hong Kong on Taiwan's GDP growth rate percentage (5)=(3)/(1)
1981	6.20	0.08	-	1.29	-
1985	5.00	0.05	-	1.00	-
1990	5.39	0.73	1.46	13.54	27.08
1995	6.42	0.79	1.53	12.30	23.90
2000	5.86	0.65	2.08	11.02	35.55
2001	-2.17	-0.85	-1.01	-	-
2002	4.64	2.60	3.30	72.33	91.83
2003	3.50	1.03	2.46	31.71	75.84
2004	6.15	3.38	3.70	59.19	64.80
2005	4.16	1.08	1.20	28.42	31.58
2006	4.80	0.86	2.69	17.91	56.04
2007	5.70	2.90	2.88	50.88	50.52
2008	0.06	-0.98	-1.04	-	-

Source: This Study.

Notes: (a) The contribution of bilateral trade with China on Taiwan's GDP growth rate in points = (the growth rate of export to China \* the export share to China over total export of Taiwan \* the share of trade export of Taiwan over total GDP) – (the growth rate of import from China \* the import share from China over total import of Taiwan \* the share of total import of Taiwan over total GDP).



# Impact on unemployment rate

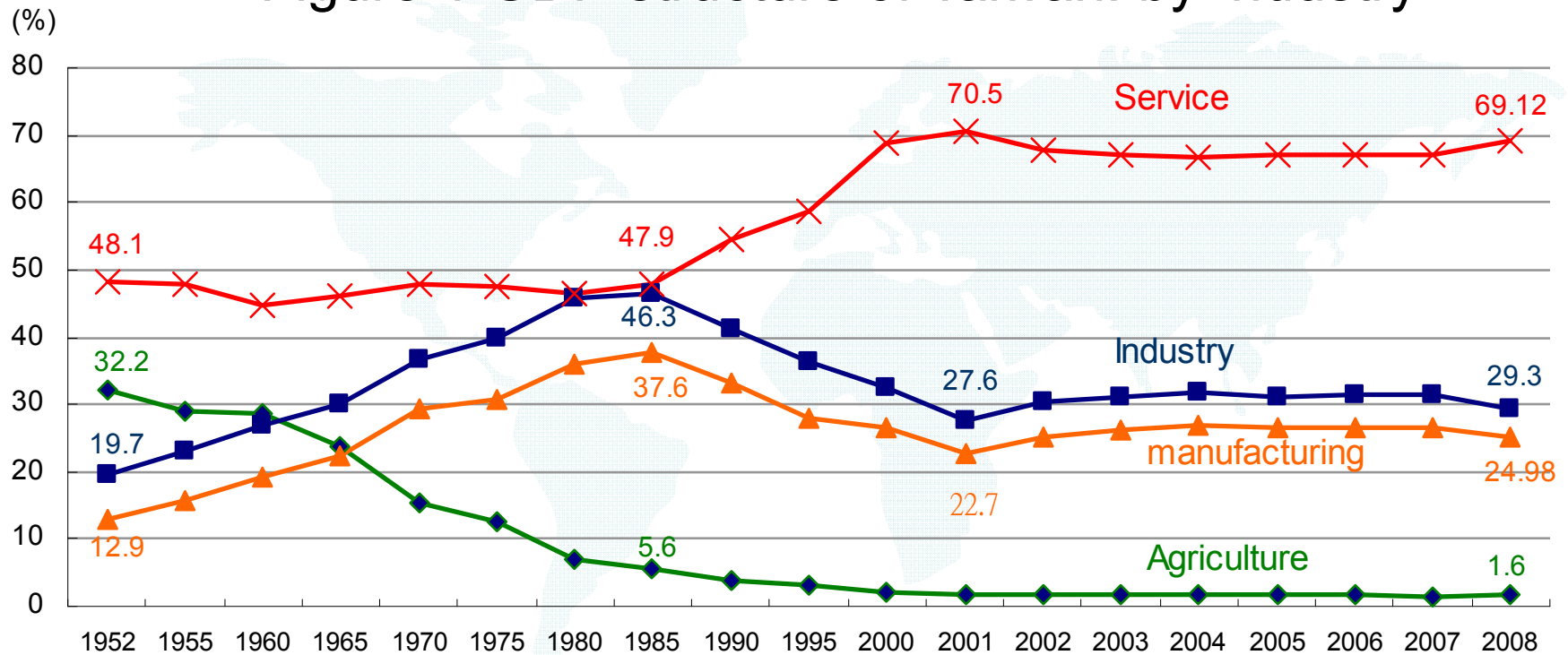
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Source: Directorate-General of Budget, Accounting and Statistics, *Statistic Abstract of National Income*, Executive Yuan, Taiwan.

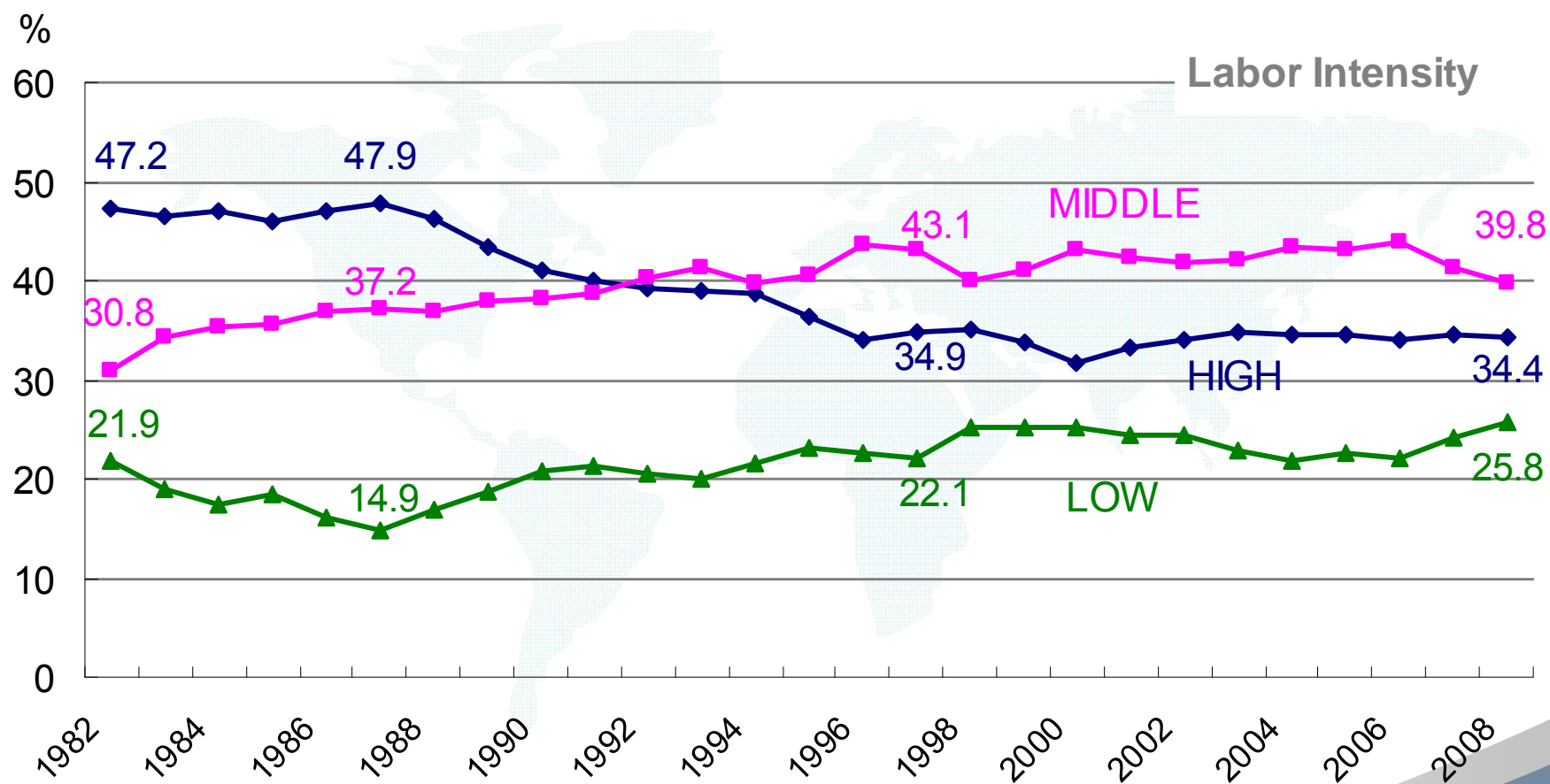
# Impact on structure change:

## Figure 1 GDP structure of Taiwan: by Industry



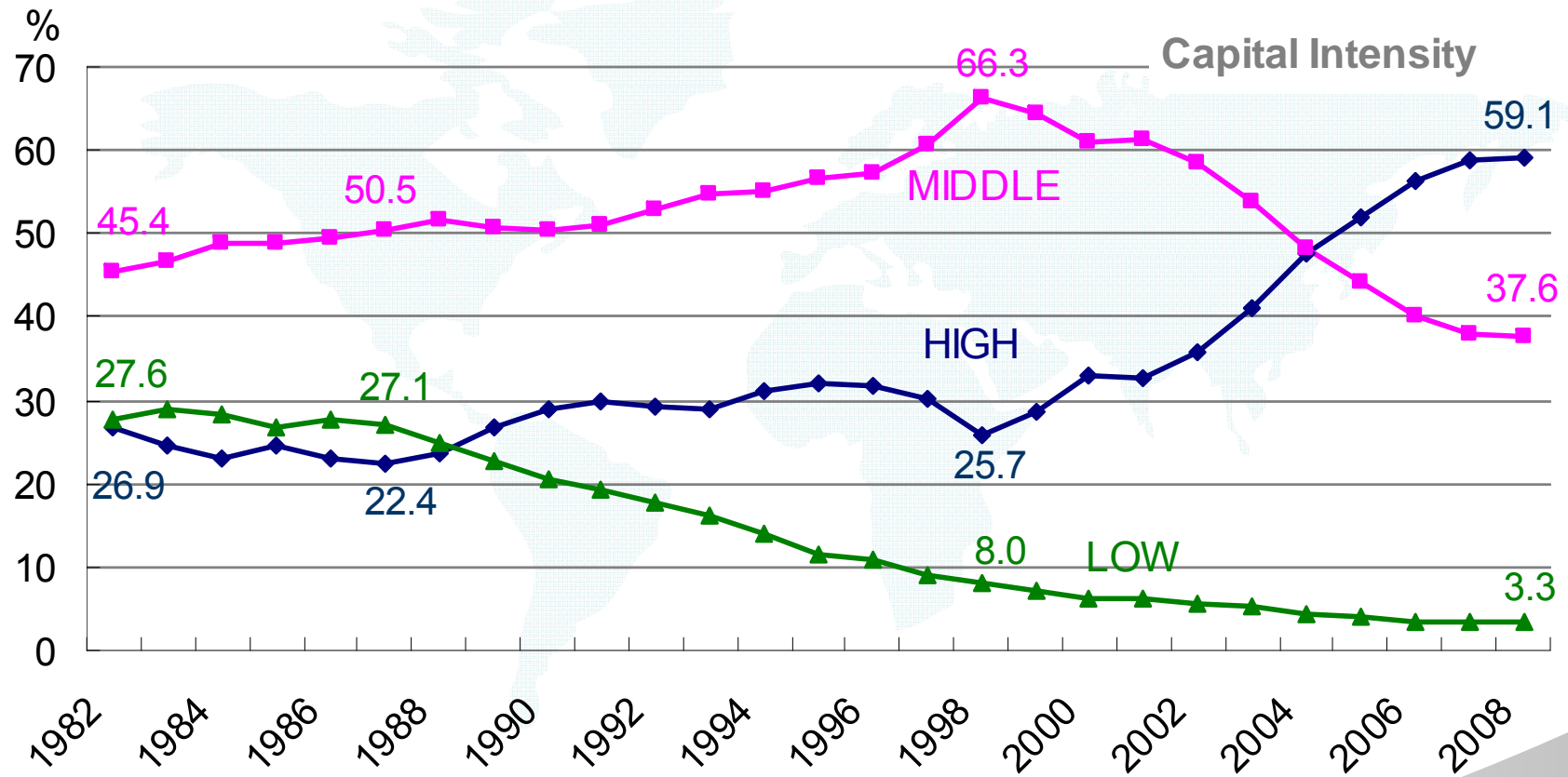
Source: Directorate-General of Budget, Accounting and Statistics,  
*Statistic Abstract of National Income*, 2009, Executive Yuan, Taiwan.

# Figure 2 Taiwan's Structural Change: Export- Labor Intensity



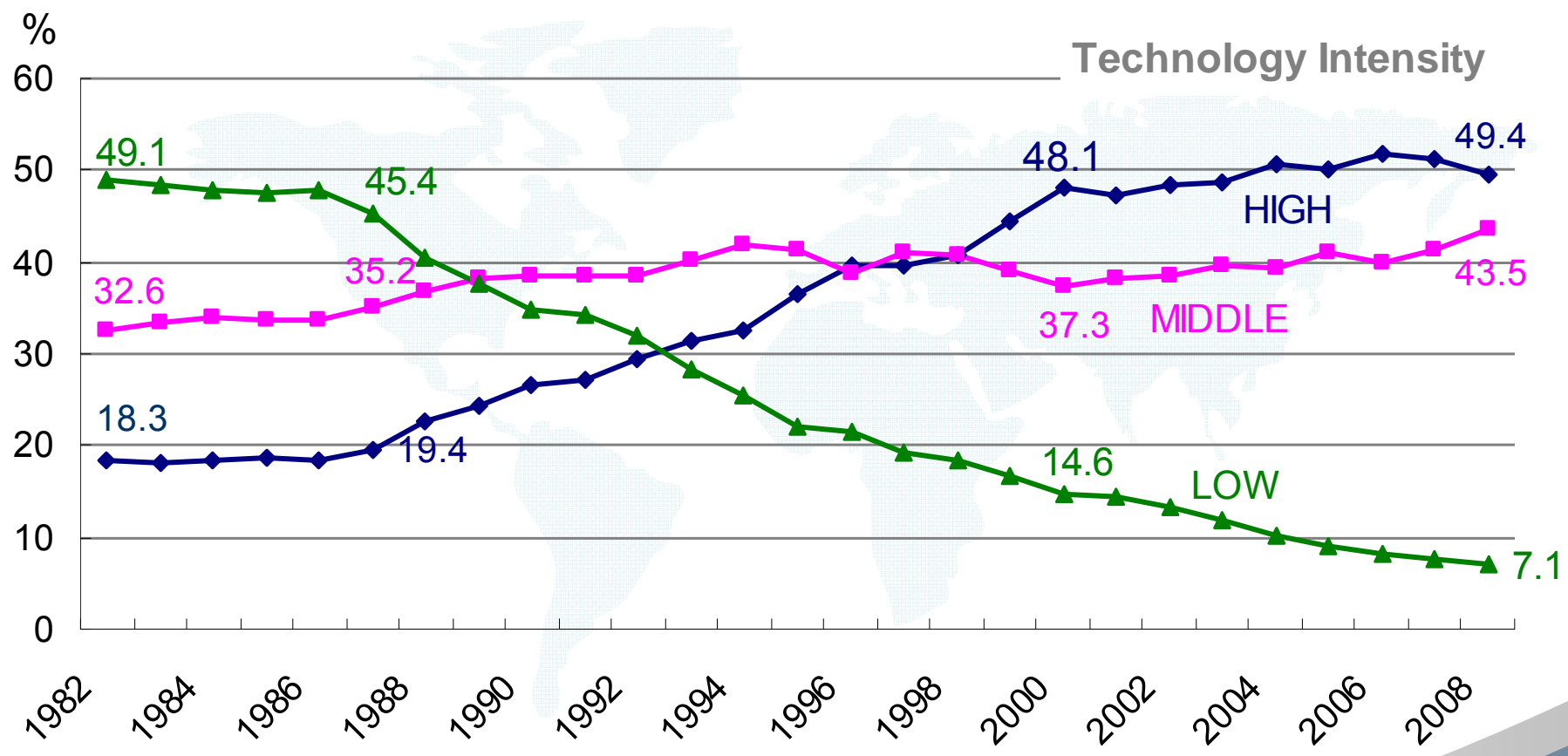
Source: Council for Economic Planning and Development, *Taiwan statistical Data Book, 2009*, Executive Yuan, Taiwan.

# Figure 3 Taiwan's Structural Change: Export- Capital Intensity



Source: See Figure 2.

Figure 4 Taiwan's Structural Change: Export- Technology Intensity



Source: See Figure 2.

# IV. Economic Cooperation Framework Agreement (ECFA) across the Strait

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The emergence of Asian economic integration:

Table 8 Asian Economic Integration

Major Country	Target Countries
ASEAN	China (2002), Korea (2005), Japan (2008), Australia & New Zealand (2010), India (2010)
Korea	ASEAN(2005), USA (2007), EU (2009)
China	ASEAN(2002), Hong Kong (2004), Macau (2004)

Source: This study.

## Table 9 Major Economic Indicators for Asian Integration: 2008

Unit: % (of the World)

	Population	Total GDP	Total Trade
China	19.62	7.14	8.33
ASEAN 10	8.65	2.42	0.54
ASEAN 10+3	30.86	19.20	16.39
ASEAN 10+6	46.63	23.10	19.35

Source: This study.

Note: 1. ASEAN 10+3: ASEAN + China, Japan and Korea

2. ASEAN 10+6: ASEAN + China, Japan, Korea, India, Australia, and New Zealand



Table 10 Taiwan's Economic Relation with Asian Integration: 2008

Unit: US\$ billion, %

	Taiwan's Export to	Taiwan's Total Trade With	Taiwan's Total FDI to
China	99.5 (38.95%)	132.5 (26.70%)	10.7(70.53%)
ASEAN 10	38.3 (15.02%)	64.0 (12.90%)	1.4 (9.10%)
ASEAN 10+3	164.2 (64.24%)	282.4 (56.92%)	12.4(81.53%)
ASEAN 10+6	170.7 (66.78%)	299.5 (60.37%)	12.4(81.65%)

Source: This study.

Note: 1. ASEAN 10+3: ASEAN + China, Japan and Korea

2. ASEAN 10+6: ASEAN + China, Japan, Korea, India, Australia and New Zealand

# The economic impact of ECFA between Taiwan and China:

Table 11 The Impact of Asian Integration on Taiwan's Economic Growth

	GDP	Export	Import
ASEAN10+1 <sup>(a)</sup>	-0.18	-0.41	-0.60
ASEAN 10+3 <sup>(a)</sup>	-0.84	-1.89	-2.74
Taiwan + China <sup>(b)</sup>	1.65	4.87	4.99
Taiwan + ASEAN 10+3 <sup>(c)</sup>	3.31	13.99	22.79

Source: (a) Shih, Yang, and Wu (2009).

(b) Chung-Hwa Institute for Economic Research (2009).

(c) Chen, Chou, and Lin (2008).

# V. Conclusion

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## Major economic factors:

- Production integration between Taiwan and mainland China
- China's domestic market

## The challenges:

- Asian economic integration
- ECFA : scheduled in May or June
- Political problems: domestic political problem inside Taiwan

Political issues across the Strait



**The end  
Thank you!**