# Economic Crisis and Its Impact: Chemical Industry in Thailand

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The economic crisis that started in Thailand since July 2, 1997 has escalated into a contagious global recession in 1998. ASEAN including Korea were probably among the hardest hit economies under the crisis. It was generally believed that the crisis was caused by lack of discipline among the private sector and outdated financial infrastructure in view of rapid and accelerated market liberalization. From the chemical industry viewpoint, the industry plays a critical role in propelling industrialization effort in Thailand. The industry, along with steel and cement industries, serves as the three main pillars for further developments of other downstream manufacturing industries such as auto, electronics, home appliances, etc. Chemical industry in precrisis era used to enjoy a good GDP annualized average growth rate of around 20 percent. With an aggressive growth rate for long period, the industry, along with Thai economy, face, peril in the 1997 crisis. The crisis effectively sets-back local demand by 3 years and forces the industry to reexamine its position and strategy for a more stable and sustainable growth in next millennium. The crisis renders a costly check and balance tools for developing economies in ASEAN to strictly maintaining fine balance and harmony in all facets of developments, industrial, human, legal and moral framework, etc. From various macroeconomic indicies announced recently, Thai economy is on the path of recovery. Local demands along with the export of chemical products have improved in the first half of 1999 and the tendency for the second half is rather promising.

## Chemical Industry in Thailand

Chemical industry in Thailand consists of chemicals and petrochemicals industries when this is classified according to process. The export statistics of Thailand in the first five months of 1999 show that petrochemicals (resins and finished plastic products) commanded three quarter of the overall export value for the whole chemical export. Within the petrochemical sector, export of resins accounted for 46.6% in terms of value, whereas the organic, and inorganic chemicals export values are only 16.4% and 3.7% respectively.

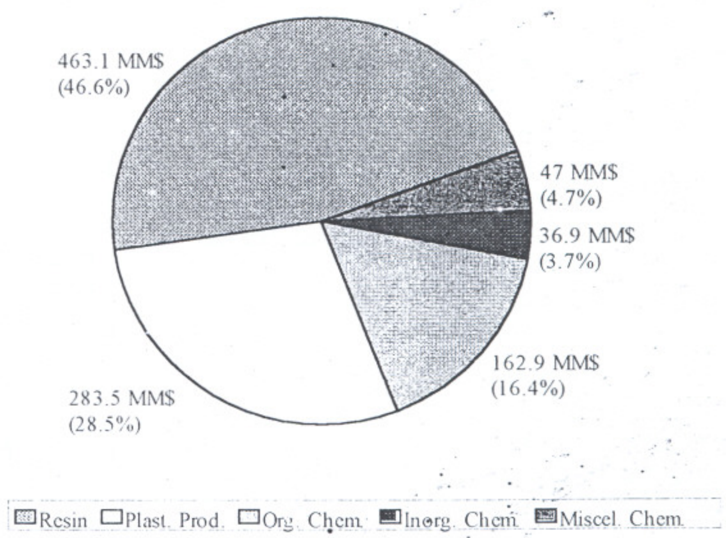


**Figure 1: Chemical and Petrochemical Exports from Thailand (Jan-May 1999)**

From the above, it is obvious that the petrochemical industry plays a major role in the overall chemical industry of Thailand. **Figure 2** shows the country's annual export value of chemicals during 1996-1999 both in US dollars and Thai Baht (THB) currencies. The figure indicates that export in US dollars flat out but the increased value in THB is due to the devaluation of currency over the period.

Along with cement and steel industries, the chemical industry of Thailand today plays a critical role in propelling the real sector by serving as a pillar for further developments of other related industries such as agroindustry, auto-electronics, home appliances, etc.

Within the spectrum of the country's export, it is also important to note the unique position of chemical industry which is obvious in both relative and absolute terms as shown in **Figure 3a & 3b.**

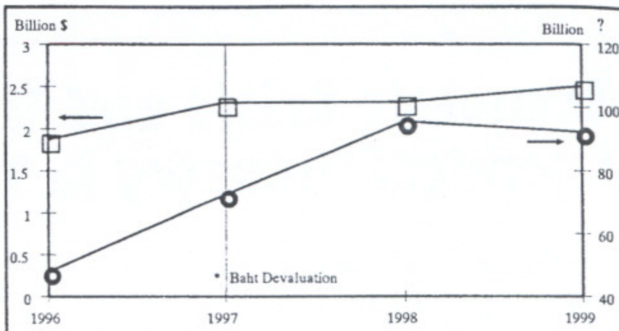


**Figure 2: Export Value, Billion $ or Billion**

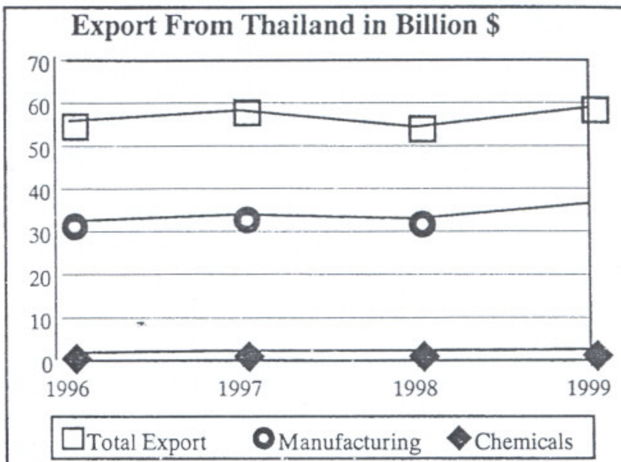


**Figure 3a: Value of Chemical Export**

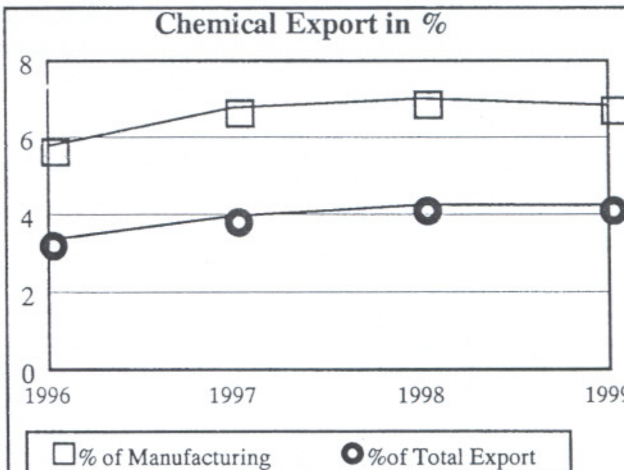


**Figure 3b: Percentage of Chemical Export**

## The Economic Crisis in Thailand

Three years earlier, in 1996, a World Bank publication indicated that Thai's economic growth rate was among the highest in the world. The average GDP growth rate for a period of 10 years during 1985 to 1995 had reached 8.5%, and Thai economy would attain top 10 of the world if only the same growth rate was to be maintained for another 10 years.

Soon after such indication in mid-July 1997, the vision turned into nightmare following the announcement by Bank of Thailand (BOT) to abolish the fixed exchange rate regime and adopt a managed float system for exchange control. The situation became worse when apparently most of the country's reserve had been virtually spent out for the currency protection. Thai government had no choice but to accept IMF's rescue program in August 1997 to restore market confidence.

Furthermore, after the first domino piece was fallen, many countries followed and triggered one of the worst regional economic recessions in many decades. Currencies fluctuated wildly and countries were in great turmoil (**Figure 4**). Thai Baht, like other currencies, was also fluctuating and even reached 60% devaluation against the US dollars in early 1998.

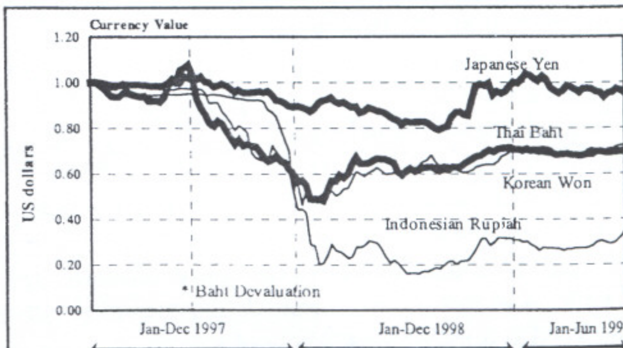


**Figure 4: Comparative Echange Rate against US dollar**

Listed are some causes that brought down Thai economy in 1997:

- The liberalization of money market in accordance with Chapter 8 of the IMF regulation in 1995 while the financial infrastructure and supervisory bodies were not readily in place;

- The rapid growth of Chinese economy, which in relative term, wiped out the competitiveness from most of ASEAN manufacturers;
- Strong dollar policy adopted by Clinton administrative and prolonged recession in Japanese economy;
- Coordinated speculative attack by Hedge Funds;
- Bad economic climate in Thailand after a decade of high growth.

## Impact on the Chemical Industry

The de facto Baht devaluation has seriously affected both the real sector and financial sectors. In general, such devaluation and the M's austerity program have dissipated shock wave through the real sector and effectively discourage domestic consumption. Domestic demand in 1998 fell by 30% to 40% from 1997 level due to shrinking GDP, low consumer confidence, and taught monetary policy which led to high interest rate and tight liquidity regime.

On the other hand, export of chemical products surged soon after the devaluation. Volume of export in 1998 accounted for half of Thailand's overall production, while the capacity utilization of chemical sector was in average of 85%. Thanks to the nature of chemical products, which are commodity in global market place, the industry could maintain reasonable high operating rate even at the most difficult time by resorting to export.

Extensive cost cutting programs that were adopted by all producers as first measure for survival in crisis, and by all operating cost denominated in local currency have greatly reduced overall production cots. However, the feedstock cost, which is normally denominated in US dollars and constitutes major part of the cost of production, could not benefit from this devaluation.

The economic crisis has effectively notified an end to the high economic growth era of Thailand and also the end of high growth period of chemical industry (1987-1997). Aggressive investment and high domestic demand growth regime of the past, which was double of the country's average annual GDP, partly contribute to the unstable economy. The crisis has triggered an exodus of capital from ASEAN and the new investment is not conceivable in the near future.

Corporations with high leverage, low capital, and lack of financial discipline are faced with the reality of hardship. Some are forced out of business and turned into unperformed asset are faced with foreclosure, while others are faced with credit risk and cash flow problem. Most of the manufacturers are undergoing certain kind of rehabilitation such as corporate and/or debt restructuring inside and outside the court proceeding.

The officially announced 50% Nonperforming Loan (NPL) of the whole Thai financial institution obviously implicated the severity of business failure and hardship.

## Slow Recovery

Thai economy has plunged down in the fourth quarter of 1998. **Table 1** shows that Thai GDP which has been at fairly high level prior to 1997 suddenly decreased after the currency devaluation in 1997 and through out 1998. The GDP for the first quarter of 1999 shows a positive figure for the first time after consecutive quarters of declining growth.

It is generally anticipated that GDP growth for Thailand in 1999 (**Table 2**) would be 1.5% as per Bank of Thailand (BOT) projection, which may imply that Thai economy is on the track of slow recovery.

**Table 1: Thailand Historical GDP Growth Rate**

| | Year (s) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1994 | 1995 | 1996 | 1997 | 1998 | | | | 1999 |
| | | | | | Q1 | Q2 | Q3 | Q4 | Q1 |
| GDP Growth Rate % (1988 prices) | **8.9** | **8.6** | **6.6** | -1.3 | -5.8 | -12.0 | -11.0 | -4.4 | **1.9** |

**Table 2: Projected GDP of Thailand for 1999**

| | 1999 GDP Prev. | 1999 GDP Adjusted |
|---|---|---|
| Bank of Thailand | 1.00% | 1.50% |
| IMF | 1.00% | 3.00% |
| JP Morgan | 2.50% | 3.50% |
| Pairbas Asia Equity | -3.00% | 1.90% |
| ABN Amro, Singapore | 0.60% | 1.60% |
| HSBC Securities | 1.00% | 2.00% |
| Capital Nomura | 0.80% | 1.20% |

For the chemical industry itself, the coordinated efforts of producers in ASEAN and Korea greatly help in stopping the free fall of chemical prices in 1998 caused by the rush to export by countries in distress to offset the shrinking domestic demand. Price of commodities in international market have started to deteriorate since the start of the crisis in mid-97. More restrained export practices are also observed by heavy weight players in countries like Korea and Japan. On other hand, Thai economic free fall in 1998 has been attributed to the government's policy to deviate from the International Monitary Fund (IMF) austerity program adopted in the latter half of 1998. The program is originally intended to instantaneously put a brake on the country's over consumption in pursuit of stability by monetary policy. Thai government has then realized the situation and has formed a remedy by cutting the interest rate the in money market and providing more fiscal deficit to stimulate the country's economy.

With the slow increase of GDP growth in the first quarter of 1999, domestic demand in chemical sector has started to improve as well. Demand of commodity resins has surged 20% over the same period of the previous year. The sign of recovery is even clearer in the second quarter where more economic indicators indicate the gradual recovery of economy as a whole. (**Table 3**)

Even though domestic demand for chemicals has been improving in early 1999, overall demand is still believed to be lower in 1997. It will take another year such that the whole sector can recover from the crisis. To summarize, the

**Table 3: Macro Economic Indicators: First 5 months of 1999 (% Change)**

| | Jan | Feb | Mar | Apr | May |
|---|---|---|---|---|---|
| Production Index | 0.4 | 2.5 | 11.1 | 8.9 | 7.2 |
| Investment Index | -23 | -22.4 | -21 | -18.7 | -16.6 |
| Inflation | 0.35 | 2.9 | 1.6 | 0.4 | -0.5 |
| Exports | -5.1 | -5.7 | -1.6 | 2.8 | 8.6 |
| Imports | -3.9 | -2.1 | 2.7 | 3.9 | 9.4 |
| Commercial Bank Deposits | 6.8 | 8 | 8.5 | 8.9 | 8.7 |
| Commercial Bank Credits | -13.2 | -6.5 | -4.2 | -4.5 | -5.3 |
| Exchange Rate (Baht/US$ Dollar) | 36.59 | 37.06 | 37.51 | 37.6 | 37.02 |

Note : The Bank of Thailand

## Implication to the Industry

There are many industrial changes created by the crisis.

a. The crisis allowed investors an opportunity to reassess their strategies and to reconsolidate their positions. The processes had largely been neglected during high growth era. As a result, large scale restructuring of local conglomerates were gradually announced, and the refocusing into the core business seems to be the only strategy adopted by both private and public sectors.

b. Corporate restructuring as well as debt restructuring issues still preoccupies most of the corporate agenda for at least the whole of 1999. The rough and tedious work of restructuring will hardly be over soon. The slow process is exacerbated further by the weakness of financial institutions at large.

c. Regrouping of asset and reallocation of resources are natural consequences of an economy in distress. Buying out from multinational corporation is increasing along with the downsizing of local capital into core business. This process provides more opportunity and opens up the country for more technological and capital participation, hence immediately strengthening the manufacturing sector.

d. The crisis also draws public scrutiny on government's economic doctrine (e.g., open monetary policy, market liberalization, modernization of legal framework), and accommodates the advancement of economy in a postagricultural society. The badly needed privatization of state enterprises becomes an issue and draws criticism from the public.

## Conclusion

The economic crisis which started in Thailand on 2 July 1997 has escalated into a contagious global recession in 1998. ASEAN countries are probably among the hardest hit economies under the crisis.

It is generally believed that the crisis is caused by lack of discipline among the private sectors and outdated financial infrastructures in view of rapid and accelerated market liberalization.

From the chemical industry viewpoint, the industry plays a critical role in propelling the industrialization effort in Thailand. The industry, along with the steel and cement industries, serves as the main pillar for further developments of other downstream manufacturing industries such as auto, electronics, home appliances, etc.

Chemical industry in precrisis era is used to enjoy a double average growth rate of GPD annually (i.e, around 20 percent), and by such an aggressive growth rate, the industry and the Thai economy were faced with shock and peril during the 1997 crisis. This however, effectively set back local demand by 3 years and forces the industry to reexamine its position and strategize for a more stable and sustainable growth in the next millennium. The crisis also renders itself a costly check and balance tools for developing economies in ASEAN to strictly maintain harmony in all facets of developments (e.g., industrial, human, legal and moral framework, etc.).

From the various macro economic indices announced recently, Thai economy is on the path of recovery. Local demands, along with export of chemical products have improved in the first half of 1999 and the forecast for second half is rather promising.

## ABOUT THE AUTHOR

***Pailin Chuchottaworn*** has a Doctoral of Engineering in Chemical Engineering from Tokyo Institute of Technology under the Japanese Government's Scholarship (Monbusho) in 1985. He used to be a lecturer in the Chemical Engineering Department of Chulalongkorn University. Afterwards, he worked as Chief of Technical & Marketing Analysis Division, National Petrochemical Pcl. in 1985, Assistant Vice President for Merchant Bangking Group, Bangkok Bank Pcl. in 1998. And now he is Managing Director of Bangkok Polyethylene Pcl.

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