Prediction of the Impact of External Factors on the Thai Economy and Recommendations Based on the Sufficiency Economy Principle*

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Abstract

Thailand's dependence on foreign countries increases the degree to which external factors affect its economy. In this regard, the application of the sufficiency economy principle will be the key to sustainable economic growth. The present study aimed, therefore, to predict the impact of external factors on the Thai economy and to make recommendations based on the sufficiency economy principle using a simulation of the economic conditions between 2009 and 2013. This quantitative and qualitative research applied a simultaneous equation model of econometric principles utilizing a systematic method. The three-stage least squares (3SLS) were also calculated. The results showed that external factors deprived the Thai economy of sufficiency, possibly leading to an economic crisis. It is recommended that a mixed policy embracing the sufficiency economy principle should be adopted; however, the implementation of the sufficiency policy should take into consideration the economic conditions of the country. That is, it should be carried out during a period of rapid

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economic expansion when sufficiency is being ignored. On the other hand, the adoption of this policy may not bring about desirable outcomes during a recession as it has a tendency to reduce private sector investment.

Keywords: *Sufficiency Economy, Prediction, External Impacts, Thai Economy*

การพยากรณ์ผลกระทบภายนอกที่มีต่อเศรษฐกิจของไทย และการเสนอแนะเชิงนโยบายเศรษฐกิจพอเพียง*

*ปภาภัทร อัครางกูร***

บทคัดย่อ

เมื่อไทยพึ่งพาต่างประเทศสูงย่อมทำให้ปัจจัยภายนอกประเทศส่งผลกระทบต่อเศรษฐกิจไทยมากขึ้นเท่านั้น การนำแนวคิดเศรษฐกิจพอเพียงมาใช้จึงเป็นหนทางสู่การเติบโตทางเศรษฐกิจที่มั่นคง ยั่งยืน งานวิจัยนี้มีวัตถุประสงค์เพื่อพยากรณ์ผลกระทบของการเปลี่ยนแปลงภายนอกที่มีต่อเศรษฐกิจไทย และเสนอแนะเชิงนโยบายเศรษฐกิจพอเพียงภายใต้สถานการณ์จำลองที่กำหนดในช่วง พ.ศ. 2552-2556 งานวิจัยนี้เป็นวิจัยเชิงคุณภาพร่วมกับวิจัยเชิงปริมาณ ใช้ข้อมูลแบบทุติยภูมิ โดยอาศัยหลักการทางเศรษฐมิติ ตัวแบบเป็นสมการเกี่ยวเนื่อง (Simultaneous Equation Model) ประมาณการพร้อมกันทั้งระบบ (System Method) มีการประมาณค่าสัมประสิทธิ์ด้วยวิธีกำลังสองน้อยที่สุดแบบสามชั้น (Three-Stage-Least-Squares) พบว่า ผลกระทบจากปัจจัยภายนอกประเทศทำให้เศรษฐกิจไทยขาดซึ่งความพอเพียง อาจนำไปสู่การเกิดวิกฤติเศรษฐกิจได้ จึงเสนอให้ใช้นโยบายผสมที่ตั้งอยู่บนพื้นฐานแนวคิดเศรษฐกิจพอเพียงในการแก้ไขปัญหา แต่มีข้อควรระวัง คือ ผลจากนโยบายทำให้การลงทุนของภาคเอกชนลดลง นโยบายเศรษฐกิจพอเพียงควรใช้ในภาวะเศรษฐกิจขยายตัว เพื่อสร้างภูมิคุ้มกัน เนื่องจากภาวะเศรษฐกิจที่ขาดซึ่งความพอเพียงมักเกิดขึ้นในช่วงเศรษฐกิจขยายตัวสูง แต่ในภาวะเศรษฐกิจชะลอตัวนโยบายเศรษฐกิจพอเพียงควรใช้เพื่อนำไปสู่การพึ่งพาตัวเอง

คำสำคัญ: *เศรษฐกิจพอเพียง พยากรณ์ ผลกระทบภายนอก เศรษฐกิจไทย*

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Introduction

Several studies have shown that ignoring economic sufficiency can lead to an economic crisis. For instance, Sussangkarn et al. (2009: 43-49) found that overconsumption, excessive investment, heavy debt obligation, overestimation of the Thai economy, uncritical economic management, unbalanced local and international competition, and the lack of good governance have all led to the economic collapse of Thailand in the past. In addition, rapid economic expansion through exports and the resultant increase in the volume of imports do not lead to positive consequences. In fact, as Panthasen et al. (2003) argue, an export-intensive economy can quickly deplete the country's resources.

Furthermore, the Thai economy is highly reliant on foreign countries as a result of the high volume of international trade as well as a high ratio of foreign debts and direct investment compared to the country's GDP. It cannot be denied that international trade creates job opportunities, increases investment in production facilities, and advances technology, thereby contributing to economic growth. However, international trade can diminish a country's self-dependence, making it particularly vulnerable to external factors. The impact of the first and second oil crises, the financial crisis in 1996, and the global economic sluggishness between 1998 and 2001 on the economic conditions of Thailand during those years until now are cases in point.

The objective of this research was, therefore, to provide guidelines based on a more sustainable solution to economic problems: the sufficiency principle. The study aimed specifically to predict the impact of external factors on the Thai economy for the years 2009 to 2012 and to make recommendations based on the sufficiency economy principle leading to a balanced, sustainable, and protected economy resistant to external factors. To this end, a simulation of the economic conditions of Thailand was developed.

Literature Review

This review of related literature is comprised of three sections. In the first section, the macroeconomic model of Thailand based on information from the Bank

of Thailand (2003), Nidhiprabha (1984), Chantrasmi (1990), Virunhaphol (1986), Limskul (1990), Limskul & Koonmee (1994), Otsubo (1988) and Saguansin (1991) is presented in order that the variables for formulating the equations to meet the research objectives can be determined. Then changes affecting the macroeconomic conditions of the country, including trade, treasury, price and production levels, finance, and exchange rates are shown in the second section. It draws on the work of Bodart & Dem (1996), Chen (1999), Sawamiphakdi et al. (1993), Fair (1999), Leeper & Zha (2001), Levin et al. (1997),Olsen & Wulfsberg (2001), Schmidt-Hebbel & Serven (1994), Sinnathambu (2001), Chaiyindeepum (1992), Westaway (1995) & Weyerstrass et al. (2001). Discussed in the last section is the application of the sufficiency economy principle to solve economic problems caused by external factors.

Changes Affecting the Macroeconomic Conditions of Thailand

The impact of external factors on the Thai economy can be explained using the AD-AS model as follows.

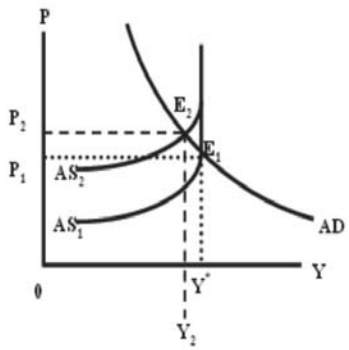

Figure 1: Impact of Increased Oil and Energy Prices

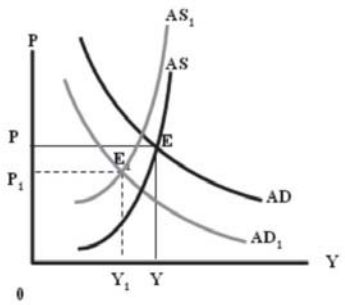

Figure 2: Impact of Increased Foreign Interest Rates

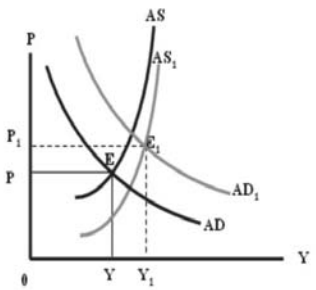

Figure 3: Impact of the Increased Income Levels of Important Trade Partners

Source: Synthesis of the literature

Figure 1. The starting equilibrium is at E_1 where the price stands at OP_1 and the output is at OY* (full-scale employment). Then the production costs rise as a result of increased oil and energy prices, thereby reducing the levels of production, employment, and the total supply. As a result, the AS line moves to the left, resulting in the new equilibrium E_2. The production level also reduces to OY_2, causing unemployment. Meanwhile, the domestic price increases to OP_2, leading to inflation. Thus, the impact of increased oil and energy prices is unemployment and inflation.

Figure 2. An economically larger country will experience deficits of current deposit accounts, which will be offset by its low interest rates attracting foreign investment. Consequently, the global capital will decrease, forcing all countries around the world to increase their interest rates. The starting equilibrium is at E_1 where the price stands at OP and the output is at OY. Later, the increased interest rates lead to a rise in the production costs and thus a decline in the production level, employment, and supply. As a consequence, the AS line moves to the left. Meanwhile, the reduced income level resulting from the decrease in employment brings about lower spending, causing the AD line to also move to the left. The new equilibrium is at E_1 with the domestic price changing to OP_1 and the output moving to OY_1. Thus, increased foreign interest rates can lead to unemployment, lower production, and reduced domestic prices.

Figure 3. The starting equilibrium is at E with the domestic price at OP and the output at OY. The increased income levels of Thailand's trade partners boost its exports, income level, and spending, thereby moving the AD line to the right. Meanwhile, the growing spending increases the employment and production levels, causing the AS line to move to the right. The new equilibrium is at E_1 where the domestic price stands at OP_1 and the output at OY_1. Thus, the growth in the income levels of the trade partners can contribute to an expansion of the Thai economy as well as increased spending and domestic prices. On the other hand, this can lead to inflation problems.

Solving Economic Problems Based on the Sufficiency Economy Policy

This section presents the literature on the application of the sufficiency economy principle, the reason why the principle is ignored in the country's economic management, and a policy to rectify the problem.

Regarding the application of the sufficiency economy principle according to the Office of The National Economic and Social Development Board or NESDB (2003: 34, 55-57), the sufficiency economy principle can be applied by people from all walks of life. The concept involves taking the "middle path" despite the changes brought about by globalization. Sufficiency leads to moderation, rationality, and thus immunity from external and internal factors. The sufficiency economy can be divided into two types: basic and progressive sufficiency economy. The basic sufficiency economy emphasizes careful consumption, self-reliance, and refraining from avarice and taking advantage of others, whereas the progressive sufficiency economy involves exchange of resources, cooperation, and collaboration for the good of society, contributing to the sustainable growth of the country.

The Office of the National Economic and Social Advisory Council (2007) has determined the benchmark for progress towards sufficiency. It also postulates that the public sector's lack of transparency leads to unfair distribution of income, insufficient domestic savings, and thus dependence on foreign investment. Transparency problems also result in a large low-income population, forcing the country to rely on export income and to become overly open. As a result, Thailand is particularly vulnerable to external factors.

A summary of the literature on the sufficiency economy is provided in the table below.

Table 1: Literature on the Sufficiency Economy

Researchers	**Focus**	
Application of the sufficiency economy	*Microeconomics*	*Macroeconomics*
1. The NESDB (2003)	✓	✓
2. Sussangkarn *et al.* (2009)		✓
3. Thongpakdee (1999)		✓
4. Vasi (1999)	✓	
5. Setthabunsang (2007, 2008)	✓	
6. The Rural and Social Development Institute, the Foundation for Thailand Rural Reconstruction Movement under Royal Patronage (2009)		✓
7. The Office of the National Economic and Social Advisory Council (2007)		✓
8. Panthasen *et al.* (2003)	✓	
9. Panthasen *et al.* (2006)	✓	✓
Causes of the lack of sufficiency	*Internal factors*	*External factors*
1. Sussangkarn (2006)	✓	✓
2. Sussangkarn *et al.* (2009)	✓	✓
3. Poapongsakorn (1999)	✓	
4. Vichyanond and Vajragupta (1999)	✓	✓
5. The Rural and Social Development Institute, the Foundation for Thailand Rural Reconstruction Movement under Royal Patronage (2009)	✓	✓
6. The NESDB (2009)	✓	✓
7. Jamarik (2001)	✓	✓
8. Jitsuchon (1999)	✓	
9. Mesinsi (2006)	✓	✓
10.Panthasen *et al.* (2003)	✓	✓
Policies to solve the ignorance of sufficiency	*Basic sufficiency*	*Progressive sufficiency*
1. Sussangkarn (2006)		✓
2. Sussangkarn *et al.* (2009)		✓
3. Panthasen *et al.* (2003)	✓	

Source: Synthesis of the literature

The necessity of managing the economy based on the sufficiency economy principle is expressed in several studies. For example, Sussangkarn et al. (2009: 165) reported that populist and capitalist solutions to economic problems as well as the traditional approaches followed by the International Monetary Fund (IMF) could, in fact, exacerbate the situation. As shown in Table 1, two studies investigated the lack of sufficiency of the Thai economy, discovering that this problem was caused by internal factors. Poapongsakorn (1999) found in his research on the relationship between the industrial development in Thailand and the sufficiency principle that the absence of sufficiency resulted from complacent business practices and unrealistically optimistic views of economic conditions. On the other hand, Jitsuchon (1999) pointed to the relationship between the economic crisis and a lifestyle following the sufficiency principle, thereby arguing that economic problems could lead to increased moderation and saving behavior.

In terms of the policies to solve the problem of ignoring sufficiency, Sussangkarn (2006: 14) and Sussangkarn et al. (2009: 55-62) reported that Thailand has changed its economic management approach from a fixed currency exchange system to a managed flat one since 1999. It has also implemented inflation targeting procedures to control the rise in commodity prices despite rapidly-increasing oil and energy expenses. Additionally, the Bank of Thailand has attempted to limit the rate of inflation by increasing policy interest rates on a regular basis and utilizing a core inflation approach that excludes the impact of the prices of oil, energy, and fresh food. These practices can be considered to be in conformity with the sufficiency principle since they create conditions that decelerate optional economic expansion. Therefore, the present research deemed the managed float exchange rate system, the inflation targeting approach, and the core inflation policy to be in accordance with the sufficiency economy principle.

However, it should also be noted that the sufficiency economy principle has several weaknesses, particularly regarding the mismatch between this practice and some types of industry. According to Panthasen et al. (2003: 196-197), the sufficiency economy may not be effective for an industry that is export-intensive. Sussangkarn et al. (2009: 93) further explains that the export-intensive industry emphasizes economic expansion while paying less attention to environmental and social factors.

Macroeconomic Model of Thailand

The relationship of certain variables in the model of macroeconomics is provided in the figure below.

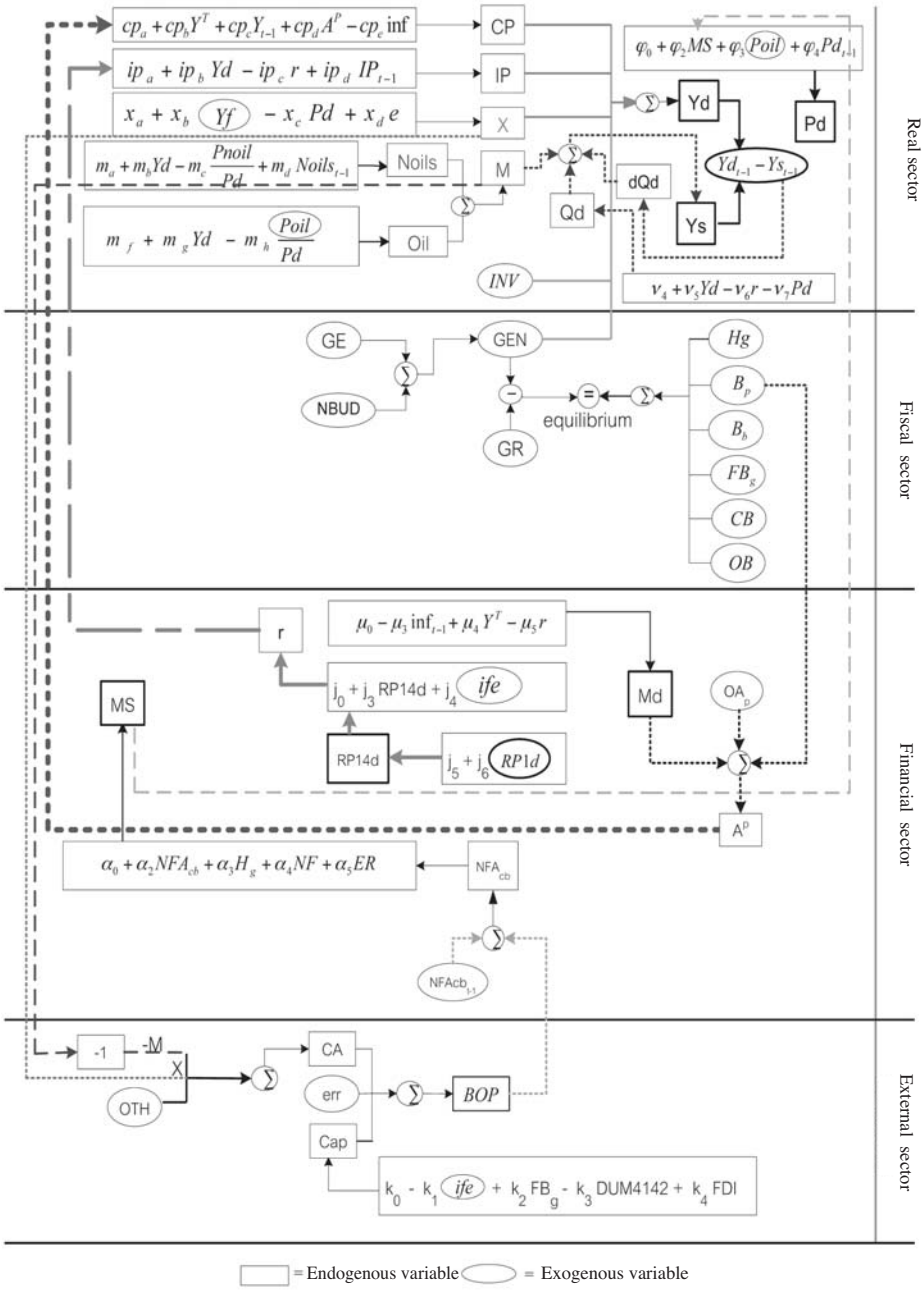

Figure 4: The Relationship of Certain Variables in the Model of Macroeconomics

Source: From a synthesis of the literature review and economic theory

Figure 4. Based on an analysis of the synthesis of the literature review and economic theory, the macroeconomic model of Thailand is made up of the following 23 internal factors.

1. Domestic output (Qd)
2. Non-oil and non-energy imports (Noils)
3. Oil and energy imports (Oil)
4. Private sector consumption (CP)
5. Private sector investment (IP)
6. Exports of products and services (X)
7. Domestic price level (Pd)
8. Money supply (Ms)
9. Money for demand (Md)
10. Domestic interest rate (r)
11. Net inow capital accounts (Cap)
12. Changes in domestic output (ΔQd)
13. Interest rate in the 14-day bond repurchase market (RP14d)
14. Aggregate supply (Ys)
15. Imports of products and services (M)
16. Aggregate demand (Yd)
17. After-tax income (Y^T)
18. Inflation rate (inf)
19. Financial assets of the private sector (AP)
20. Sources for compensating government budget deficit (G)
21. Total government expenditure (GEN)
22. Net foreign assets of the central bank (NFAcb)
23. Surplus of balance of payment (BOP)

The following are 34 external factors comprising the macroeconomic model of Thailand.

1. Exchange rate (e)
2. Foreign direct investment (FDI)
3. After-tax income in the previous period (Y^T_{t-1})
4. Private sector investment in the previous period (IP_{t-1})

5. Income levels of important trade partners (Yf)
6. Excess reserves of commercial banks (ER)
7. Net claims from financial institutions of the central bank (NF)
8. Government bonds sold to the central bank (H_g)
9. Interest rate in the one-day bond repurchase market (RP1d)
10. Foreign interest rate (ife)
11. Government bonds sold to foreign countries (FB_g)
12. Changes in merchandise inventory (INV)
13. Government bonds sold to the private sector (Bp)
14. Other assets of the private sector (OAp)
15. Government bonds sold to commercial banks (Bb)
16. Utilization of treasury reserves (CB)
17. Government bonds issued for other reasons (OB)
18. Government's utilization of non-budgets (NBUD)
19. Budget expenditures of the public sector (GE)
20. Net foreign assets of the central bank in the previous period ($NFA_{cb, t-1}$)
21. Other types of surplus (OTH)
22. Errors in the data collection of the foreign sector (err)
23. Inflation rate in the previous period (inf_{t-1})
24. Dummy variables (Dum4142) representing the negative impact on the net inflow capital after the economic crisis in 1997; the years 1998-1999 are represented by 1 and the other years are represented by 0
25. Oil and energy prices (Poil)
26. Domestic price level in the previous period (Pd_{t-1})
27. Personal income tax (Tax)
28. Actual deviation in the data collection of the business sector (std)
29. Ratio of non-oil and non-energy prices and domestic price level (Pnoil/Pd)
30. Ratio of oil and energy prices and domestic price level (Poil/Pd)
31. Non-oil and non-energy imports in the previous period ($Noils_{t-1}$)
32. Prices of oil and energy imports (p)
33. Aggregate demand in the previous period (Yd_{t-1})
34. Aggregate supply in the previous period (Ys_{t-1})

Employing the above internal and external factors, a total of twelve behavioral equations can be formulated as follows:

1. Equation of domestic output. The quantity of domestic output (Qd) has a direct correlation with the level of income (Yd) but an inverse correlation with the domestic interest rate (r) and domestic price (Pd).

2. Equation of non-oil and non-energy imports. The non-oil and non-energy imports (Noils) have a direct correlation with the level of income (Yd) and the non-oil and non-energy imports in the previous period ($Noils_{t-1}$) but an inverse correlation with the ratio of the price of non-oil and non-energy imports and the domestic price (Pnoil/Pd).

3. Equation of oil and energy imports. The oil and energy imports (Oil) have a direct correlation with the level of income (Yd) but an inverse correlation with the ratio of the price of oil and energy imports and the domestic price (Poil/Pd).

4. Equation of private sector consumption. The private sector consumption (CP) has a direct correlation with the after-tax income in this period (Y^T), the after-tax income in the previous period (Y^T_{t-1}), and the financial assets of the private sector (A^P), but an inverse correlation with the inflation rate (inf).

5. Equation of private sector investment. The private sector investment (IP) has a direct correlation with the level of income (Yd) and the private sector investment in the previous period (IP_{t-1}) but an inverse correlation with the domestic interest rate (r).

6. Equation of product and service exports. The product and service exports (X) have a direct correlation with the income levels of Thailand's trade partners (Yf) and the exchange rate but an inverse correlation with the domestic price (Pd).

7. Equation of domestic price. The domestic price (Pd) has a direct correlation with the money supply (Ms), the price of oil and energy (Poil), and the domestic price in the previous period (Pd_{t-1}).

8. Equation of money for demand. The money for demand (M^d) has a direct correlation with after-tax income (Y^T) but an inverse correlation with the inflation rate in the previous period (inf_{t-1}) and the domestic interest rate (r).

9. Equation of money supply. The money supply (Ms) has a direct correlation with the net foreign assets of the central bank (NFA_{cb}), the net claims of the Central Bank from the government (H_g), the net claims of the central bank from financial institutions (NF), and the excess reserves of commercial banks (ER).

10. Equation of domestic interest rate. The domestic interest rate (r) has a direct correlation with the interest rate in the 14-day bond repurchase market (RP14D) and the foreign interest rate (ife)

11. Equation of the interest rate in the 14-day bond repurchase market. The interest rate in the 14-day bond repurchase market has a direct correlation with the interest rate in the one-day bond repurchase market.

12. Equation of net inflow capital account. The net inflow capital account (Cap) has a direct correlation with the government's foreign debts (FBg) and the foreign direct investment (FDI), but an inverse correlation with the foreign interest rate and the dummy variables representing negative consequences on the net inflow capital account after the financial crisis in 1997 (DUM4142).

Research Procedures

This study employed both quantitative and qualitative approaches. Based on economic and econometric principles, the quantitative analysis utilized secondary data to form a simultaneous equation model following the system method. The three-stage least squares (3SLS) were also calculated. Then the equation model was validated in terms of identification, cointegration, and forecasting simulation. All the data processing was carried out using Eview 5.1 (http://www.eviews.com). As for the qualitative analysis, a review of related literature was conducted on the impact of external factors on the macroeconomic conditions of Thailand and the application of the sufficiency economy principle to solving economic problems.

The research procedures revolved around three stages: 1) the development of a macroeconomic model, 2) the validation of the model, and 3) the prediction of the impact of external factors on the Thai economy as well as the provision of recommendations at the policy level based on the sufficiency economy principle.

Research Results

The findings were derived from the simulation of three perspectives on the economic conditions, namely an optimistic perspective, a realistic perspective, and a pessimistic perspective, as well as the evaluation of the effectiveness of different economic policies.

The Impact of External Factors on the Thai Economy during 2009 and 2012

Table 2. For the three perspectives, all or some of the following three scenarios were simultaneously examined: 1) increased oil and energy prices, 2) higher foreign interest rates, and 3) important trade partners' rising income levels. The results were as follows.

As for the optimistic perspective, it was found that the first two scenarios would lead to a decrease in imports and private sector consumption, reflecting sufficiency in the forms of self-reliance and moderation. On the other hand, the third scenario could bring about the lack of sufficiency for the following reasons. First, the rise in the income levels of important trade partners would motivate Thailand to export more to those countries and import more from them. This was tantamount to an accelerated rate of the depletion of our resources and the decline of our self-dependence. Higher imports would also increase private sector consumption, resulting in reduced moderation and thus higher financial risks.

Table 2: The Summary of External Impacts Prediction and Policy Proposal on Sufficiency Economy

(Unit: THB Million)

Model	The prediction of impact result focusing on the targeting variable			Reply the answer no.	Remark
	The mean per quarter between 2009 and 2013				
	Export	Import	Private's consumption		
Case 1. The three perspectives					
1.1 Increased oil and energy prices	Stable	reduce 616-618	reduce 101	1	Sufficiency economy
1.2 Higher foreign interest rates	Stable	reduce 1,135	reduce 3,457	1	Sufficiency economy
1.3 Important trade partners' rising income levels	increase 35,406	increase 20,392-20,394	increase 26,654	1	Lead to a lack of sufficiency
Case 2. Recommendations based on the sufficiency economy principle					
2.1 The devaluation of Thai baht	reduce 5,652-5,684	reduce 2,526-2,541	reduce 4,163-4,187	2	First effective method
2.2 Inflation targeting	Stable	reduce 1,368-1,416	reduce 2,711-2,729	2	Second effective method
2.3 Determination of core inflation	Stable	reduce 285-290	reduce 746-760	2	Third effective method
Case 3. The realistic perspective	increase 29,697-29,730	increase 12,933-14,619	increase 10,689-10,726	1	The problem is alike with the case 1 but less serious than 1
The implementation of the policies to solve the economic problems simulated based on the realistic perspective	reduce 143-210	reduce 354-577	reduce 881-975	2	Sufficiency economy
Case 4. The pessimistic perspective	increase 33,261-33,291	increase 14,352-15,408	increase 14,152-14,193	1	The problem is alike with the case 3 but more serious than 3
The implementation of the policies to solve the economic problems simulated based on the pessimistic perspective	reduce 3,707-3,770	reduce 58-231	reduce 4,342-4,440	2	Sufficiency economy

Source: From calculation

In the third scenario, we incorporate an external shock into the model. The three variables follow the trend calculated from the data. With respect to the realistic perspective (1SD representing risk and assuming the risk to remain there), the third scenario was found to likely lead to a lack of sufficiency as important trade partners' higher income levels would cause Thai exports and imports to go up. In other words, resources would be depleted more quickly and the country would become less self-reliant. Additionally, private sector consumption would increase, reflecting a decline in moderation. In comparison with those simulated based on the optimistic perspective, the problems associated with this perspective seemed to be less severe. (Recommendations based on the sufficiency economy principle will be made in the next section.)

Regarding the pessimistic perspective, similar patterns were identified. That is, the growth in the income levels of trade partners would contribute to the rise in exports and imports, thereby accelerating the rate of the depletion of resources as well as worsening moderation because of the increased private sector spending. Furthermore, the problems associated with this perspective were more severe compared to those simulated based on the realistic one. (Recommendations based on the sufficiency economy principle will be made in the next section.)

Recommendations Based on the Sufficiency Economy Policy

The second research objective was to make recommendations based on the sufficiency principle that would lead to a balanced, sustainable, and protected economy resistant to external factors. Three types of policies were evaluated, namely the devaluation of Thai baht, inflation targeting, and the determination of core inflation. Such policies were found to be effective in solving sufficiency problems but to a different degree, with the devaluation of Thai baht being the most effective policy and the determination of core inflation being the least effective one. It should be noted, nevertheless, that these policies could result in a decline in private sector investment and thus employment.

When the three policies were implemented to solve the problems simulated based on the realistic perspective of the economic conditions, it was found that the devaluation of Thai baht, inflation targeting, and the determination of core inflation

could reduce exports at the rate of THB143-210 million per quarter, imports at the rate of THB354-577 million per quarter, and private sector consumption at the rate of THB881-975 million per quarter. Accordingly, the problems associated with the depletion of resources, self-reliance, and moderation would be bettered. However, a fall in private sector investment and employment should again be taken into consideration.

In comparison, the implementation of the policies to solve the economic problems simulated based on the pessimistic perspective showed that it could reduce exports by THB3,707-3,770 million, imports by THB58-231 million, and private sector consumption by THB4,342-4,440 million. In other words, the problems relating to the depletion of resources, self-reliance, and moderation would become less severe. Again, the issues of private sector investment and employment should not be ignored.

Conclusions

The simulation of the optimistic, realistic, and pessimistic perspectives on the economic conditions suggests that the lack of sufficiency can lead to an economic crisis, a finding consistent with that of Sussangkarn et al. (2009). Additionally, achieving economic growth through over-reliance on exports is likely to bring about disastrous consequences since it will accelerate the extent of resource depletion, diminish self-dependence, and raise private sector consumption. The application of three economic policies based on the sufficiency principle, namely the devaluation of Thai baht, inflation targeting, and the determination of core inflation, can lead to a state of sufficiency, thereby maintaining the momentum of the Thai economy.

It is worth noting, nevertheless, that the sufficiency economy policy should be implemented when the economy is expanding as it is during this period that sufficiency is often ignored. This finding is in agreement with those of Jitsuchon (1999), Poapongsakorn (1999), and Vasi (1999). On the other hand, the principle may not be appropriate during a recession, for what is needed is the conditions which boost the economy rather than slow it down.

Strengths of the Study

1. Unlike those of past studies, the model applied in this research incorporates the factors pertaining to total supply, resulting in an equation that can be adjusted in the next period using the excess demand variable. The present study is also unique in that it emphasizes only the external factors affecting the Thai economy and offers solutions to economic problems based on the sufficiency principle.

2. This study simulates the economic conditions from optimistic, realistic, and pessimistic perspectives. It also examines the factors that have not been taken into account before, namely government bonds issued for other reasons and the interest rate in the 14-day bond repurchase market, which is a function of the interest rate in the one-day bond repurchase market.

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