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## APPENDICES A

### Thailand's Labor and Social Security Statistics (2003)

#### Demographic Structure of Thailand (Person Th)

Age	Male		Female		Total	
	Number	Percentage	Number	Percentage	Number	Percentage
0-4 yrs	2,118.3	3.3	2,075.5	3.2	4,193.8	6.5
5-9 yrs	2,781.1	4.3	2,673.3	4.2	5,454.4	8.5
10-14 yrs	3,034.7	4.7	2,981.4	4.6	6,016.1	9.3
15-19 yrs	2,786.4	4.3	2,714.5	4.2	5,500.9	8.5
20-24 yrs	2,904.3	4.5	2,819.4	4.4	5,723.7	8.9
25-29 yrs	2,919.2	4.5	2,819.5	4.4	5,738.7	8.9
30-34 yrs	2,793.2	4.3	2,700.0	4.2	5,493.2	8.5
35-39 yrs	2,550.1	4	2,534.8	3.9	5,084.9	7.9
40-44 yrs	2,248.3	3.5	2,308.6	3.6	4,556.9	7.1
45-49 yrs	2,102.3	3.3	2,146.5	3.3	4,248.8	6.6
50-54 yrs	1,673.5	2.6	1,783.1	2.8	3,456.6	5.4
55-59 yrs	1,225.2	1.9	1,292.2	2	2,517.4	3.9
60-64 yrs	948.1	1.5	1,016.9	1.6	1,965.0	3.1
65-69 yrs	722.5	1.1	844.8	1.3	1,567.3	2.4
70 yrs +	1,183.0	1.8	1,537.2	2.4	2,720.2	4.2
<b>Total</b>	<b>31,990.3</b>	<b>49.8</b>	<b>32,247.7</b>	<b>50.2</b>	<b>64,238.0</b>	<b>100</b>

#### Total Labor Force Status (No. and #)

	Male	%	Female	%	Total	Total %
<b>Total Labor Force</b>	19,516.5	61	15,967.0	49.5	35,483.5	55.2
<b>Current Labor Force</b>	19,445.1	60.8	15,758.7	48.9	35,203.8	54.8
Employed	19,071.3	59.6	15,493.5	48	34,564.8	53.8
Unemployed	373.8	1.2	265.2	0.8	639.0	1
<b>Seasonally Inactive Labor Force</b>	71.4	0.2	208.4	0.6	279.8	0.4
<b>Not in Labor Force</b>	4,539.6	14.2	8,550.4	26.5	13,090.0	20.4
<b>Persons Under 15 Years Old</b>	7,934.2	24.8	7,730.3	24	15,664.5	24.4
<b>Total</b>	<b>31,990.3</b>	<b>100</b>	<b>32,247.7</b>	<b>100</b>	<b>64,238.0</b>	<b>100</b>

### Breakdown of Covered Population

	Members	Dependents	Total
Civil Servant	1,750,511	3,682,585	5,433,096
State Owned Enterprise	277,953	370,613	648,566
Private School	16,049	24,720	40,769
Social Security Office	6,666,003	-	6,666,003

### Population Without Social Security by Labor Force Status

	Total	Percentage
Employer	937,518	1.8
Self Employed	9,999,183	19.5
Unpaid Family Worker	7,456,882	14.5
Private Employee	6,436,398	12.5
Others	881,386	1.7
Not in Labor Force	11,234,626	21.9
Under 15	14,353,389	28

### Means of Financing Medical Expenses

	Total	Percentage
Civil Servant	5,382,717	8.4
State Owned Enterprise and Private School	742,721	1.2
Social Security Office	6,576,613	10.2
National Health Insurance	47,199,344	73.5
Out of Pocket	2,435,651	3.8
Private Insurance	1,312,813	2
Others	588,113	0.9



### Risk Priorities Among Different Age Groups

	1st Risk	2nd Risk	3rd Risk
15-29 yrs old	Sickness (27.5%)	Job Loss (21.7%)	Death of income earner (14.2%)
30-59 yrs old	Sickness (34.9%)	Job Loss (13.9%)	Loss of harvest (10.3%)
60 yrs or more	Becoming Old (33%)	Sickness (32.2%)	Death of income earner (12.1%)

### Social Protection Needs of Non-Covered Persons (Age 15 years and up)

Social Protection Needs	No. of People	Percentage
Sickness	11,816,270	32
Pensions	7,770,490	21
Job Loss	5,607,278	15.2
Agricultural Protection	3,879,327	10.5
Child Care	2,447,918	6.6
Education Grant	2,208,099	6
Occupational Injury	1,118,062	3
No Risk	810,456	2.4
Maternity	177,950	0.5
Others	988,406	2.2
Unknown	238,741	0.6
<b>Total</b>	<b>36,945,986</b>	<b>100</b>

### Non-Covered Ratio of Specific Groups Population

	Covered Population	Non-Covered Population	Total Population
Agriculture and Fishery Workers	627,758	13,615,004	14,242,762
Low Income Household Members	681,922	10,523,484	11,205,406
Self Employed w/o Employees	753,670	9,999,186	10,752,856
The Elderly	1,731,798	7,030,893	8,769,928
Elderly Widow/ers	385,465	2,114,717	2,501,681
Construction Workers	122,337	800,119	922,456
Street Vendors	37,805	715,520	753,325
Home workers	70,861	701,039	771,900
Transportation Workers	287,586	529,080	816,666
Domestic Workers	19,647	170,915	190,562

# APPENDICES B

## Interview Transcripts and Highlights

### Full Interview Transcripts

\*Answers are translated from Thai to English, and corrected for consistency to questions presented

#### 1. *From your perspective, what is the definition of social security?*

##### **Economics:**

People in society should have some security in their lives such as having something to eat, decent living accommodations when they are unemployed, or unable to work. When talking about social security it is usually referred to those of working age and thereafter, where childhood benefits are thought of separate from this issue, and have their own set of governing laws.

##### **Political Science:**

Social security acts as insurance for people's futures. It's something that not only alleviates poverty but also insures against rough times, against risks and accidents, or any bad things that could have to a person in the future.

##### **Law:**

It is the duty of the state to provide services such as education, health, and public housing as the primary function of the government. Social security just ensures the participation

of the people in order to provide such services. As a means of survival, personal dignity is important to portray when a person becomes unemployed and has no other means of income. When this happens it is the responsibility of the state to ensure that, that person does not go hungry, become ill, or homeless.

**Finance:**

Social security is a method of contribution to safeguard your savings for future usage. In terms of Thailand it is very small, considering the amount of money collected from tax revenue today, and the money received during retirement.

**Sociology:**

From my own opinion and experience, social security is when the state participates partially in the provisions of welfare towards the workforce and for the employers to become responsible for the well-being of their employees.

***2. What do you think is the role of social security in Thailand?***

**Economics:**

According to the social security office, services provided only go towards those that contribute towards it. In an agrarian society, social security is not required because individuals in families and extended families are the main supporters of the household. Children who work for the family in the fields are not considered labor, but part of family



activities. When society turns to become employee and employer status, wages need to be paid, and a main concern is disability of the labor force. When health reasons arise within the lifespan of a worker, which makes them unable to work, income is immediately cutoff. The second concern is unemployment, where the worker is dismissed from the labor force.

Another issue that arises from this is the introduction of women in the work force, where pregnancy and child care are of concern, because the burden of child care is on the mother.

This becomes a problem since in society women earn lesser wages than men even though the work content is the same. This gave birth to the idea of child allowances. Due to this type of society, old age pensions are required since the extended family no longer exists. Families are having lesser children; therefore everybody has to save for themselves. Duty of government is to help them a little bit so that they may have the motivation to save, through the forced accumulation of capital, where individuals forego present day consumptions in order to maintain future levels of consumption.

### **Political Science:**

According to the tripartite regime part of social security should cause a redistributive effect where the amount of assistance received should depend on the person's ability to receive income. For example, people who earn more should contribute more for their own sake where the government then contributes less for these types of individuals. And if the person is of low income, they would contribute less, while the government contributes more. A progressive system.

### **Law:**

100 years ago, the primary function of the government is to provide security, be it through the police or military. Secondary function was to provide education and housing for the people. However today the primary function has changed to providing social services to the people. Before the state's concern only dealt with security of its borders, today the focus is on economic growth, where the dependency has to do with the welfare of its people. Quality of life must be achieved, where workers in a country have a sense of security and ability to work.

**Finance:**

The role of the social security office is unclear. I as a member of the SSO for 16 years have never been contacted by the office at all. The only time the SSO makes contact with you is when they send you a notice of house much tax deductible income you will receive. At a personal level, the SSO doesn't even know who you are.

**Sociology:**

In what I know and have confronted before, the TSSO has just awakened itself towards the responsibilities of rights it needs to protect of the general workforce, for employers and employees to provide much needed welfare for the benefit of a company's labor force. The state has just begun to emphasize the importance of worker protection, and safeguarding worker's rights, beginning in 1990, which has only been around for the past 16 years.

3. *Do you think that government is the best entity to judge what types of welfare should be provided? Econ*

**Economics:**

Before countries used a system called defined benefits. The problem with this is that the government becomes the investor, where if investments were placed improperly the amount of return does not support future income requirements, it has chances of going broke. Another problem to this is the fact that people are living longer, and having lesser children. Defined benefits that are government managed face serious problems. Governments have the tendency to use such funds to support other programs, and covering up cost. A better alternative would be defined benefits, but privately managed. Similar to how the government pension fund (GPF) was managed, where investors ensure the proper amount of return. These are the systems that do not go broke, and usually make money for its members. Another regime is called defined contributions where benefits are not guaranteed. You get what you saved, but return on investments, which is how GPF operated. Thai civil servants are recipients of both regimes. The first amount after retirement is funded by defined benefits from the government, and a second amount from defined contributions by the GPF. From here after retirement, each individual has to manage their own money. In some developed countries, social security reform requires that upon receivable of initial funds for retirement, you are required to invest a portion of that in insurance, who guarantees you through defined benefits, annual or monthly income for the rest of your life.

**Political Science:**



Yes I agree to part of it that government should have the ability to say what types of programs it will provide. But ideally in a democracy the laws and institutions must adhere to public opinion. In this sense public opinion is very important. I agree with it because it is part of government function and responsibility.

**Law:**

Welfare is not something that the normal average everyday person should decide on what they want to use or what they are going to pay for. It is the duty of the government to decide and implement such programs. Suppose today the government is ready to provide universal education for everyone, which means they have the institutional structures and funding in place already. But if you the people, say you demand such a program immediately, means the government is ill prepared, and will just find whatever means, without careful planning, to provide you with those services, which will end up bad and ineffective. You need to start off with a policy, or idea in mind, and work from it.

Policies such as public housing are more difficult. You need available empty land, which today is pretty much non-existent. Construction, workers, and selection criteria of who you want to live in such projects are required. Policies such as education and health care are much easier to initiate and provide, which was the direction that Thaksin was already taking. Even though Thaksin already initiated 2 policies of education and health, but is no longer in power, there needs to be a continuation of these policies into the next government, which is public housing and social security. Thailand cannot afford to restart every program each time it changes government or constitution.

**Finance:**

The government should be the co-sponsor of programs but not the ones who decide what level of services should be provided. Level of service should be decided by the employees who are members of the SSO. Thai government when they dictate policy, they do not view it from the working class man, but from the viewpoint of bureaucrats. It is incomparable to have a government civil servant whose income is based on minimum wage or income attainment due to rank to tell how much taxes or level of service will be available to a person who earns market wages. There is a difference between a person who works a lot, and a person works the same amount but has high productivity output. This is the concern for the services provided by the social security office, but not the programs that are initiated. The programs are not the problem, but the ones who service them are.

**Sociology:**

In reality, the people should have the rights in choosing or deciding what types of welfare they want, since the individual should know best what is good for them, not the state. If this is the case, the government should build a framework in order to distinguish its boundaries of responsibilities and duties of the state. The amount of level of welfare programs provided should be determined on the current situation of the country. In rural areas, we as government officials trying to meet the concerns of the people, only offer assistance in starting up programs that will make the people more self reliant. Offering them guidance, but the people themselves must learn to do the rest on their own. What I have found out when developing these projects in small communal villages is that the

people will immediately ask what we will do for them, and they will not be responsible to carry it own for themselves without the state holding their hand. In terms of emergency cases, we will provide as much assistance as possible, but the end result is that people must also help themselves, not become self reliant on the state to provide them with everything. People must learn to help one another, and become less dependent on the state, where the responsibility of the state is just guidance, not initiator and facilitator.

*4. What do you think are the advantages and disadvantages of a government sponsored pension plan? Econ*

**Economics:**

It is a good thing that pension is implemented by the government because people sometimes are too nearsighted than they should be. That way government can put in incentives such as taxes for people to do so for forced contributions for the overall stability of society. However government managed does not sound so good due to inefficiency and lack flexibility when seeking opportunities when using the fund. Government should play the regulatory role. Be the regulator but not the operator. Government should ensure good database and compliance which is very difficult for Thailand right now. Good databases to make sure you know what is going on. Compliance of fund managers, employers and employees because sometimes the SSO does not even know whether or not the employer or employee has paid their taxes. So they should make the system more efficient and less of a hassle during payment. Fund



management should be held by the private sector, but it is for the government to realize that at a later time.

**Political Science:**

If the system works well, then it guarantees the people who are under the program which is its advantage. The disadvantage is those who choose to do private pension plans, where people are not responsible or farsighted enough to maintain their savings for future consumption capabilities. It should be the burden of the government, where someone has to pay, be it private or public. Social security must be efficiently managed, where the system does not cause the country to go broke.

**Finance:**

It does not have any impact when you consider the standard of living. Especially when talking about people who live in Bangkok, for example, if they make only 3 to 4,000 baht a month, what can you actually afford to do with that money? Now consider the amount of time before retirement which could be 20 years from now. Social security tax collected from a person who makes only 4,000 baht a month, in 20 years, with consideration to inflation, living in Bangkok, at retirement it is nothing. But to a person who lives outside Bangkok, in rural areas, it could be something. The concern here is that the majority membership of the SSO is concentrated in Bangkok. The system itself has already failed. The state has to be incredibly generous in its expenditures towards human development.

**Sociology:**

The advantages of government involvement are the sharing of contribution burdens according to the tripartite regime. If the state was not involved, the burden of social security taxes would fall on the employer, unlike Singapore's central provident fund, is not possible in Thailand, since the sharing of responsibility is not fully realized by Thais. Therefore the government sharing the burden of the employer and employee is a good thing to have. But the truth is that employers should have a sense of responsibility towards their workers, without the state having to tell to.

5. *Thailand divides its workforce into two categories. If the purpose of social security is to alleviate poverty and financial burden, does this mean Thailand is targeting the wrong group?*

**Economics:**

Social security should be provided for both groups. Even within the two groups, the lower income portion of formal groups need incentives to save also. Informal groups tend to still live like the agrarian society, where there is no incentive to pay taxes for social security. The informal sector needs to be divided up more because some of them have higher earnings than formal sector members, such as freelance workers not belonging to any large organization. The population of farmers is also included in the informal sector which distorts the statistics of this section of population. By taking out the farmer's population, the informal group will be a lot smaller. Even though informal members do

not receive benefits from the SSO, the government still tries to provide them services such as universal health care and education.

**Political Science:**

Currently there are two groups in the workforce, called formals and informals, those who are members of the Thai social security office, and those not. To say that the informal group should be part of the social security office is just to provide fairness to everyone, so that there is no separation between formal and informal. This would turn the regime into a comprehensive social security which is a totally another ideal.

**Finance:**

The problem is you are talking about social security. Social security membership, if you are not part of any large organization, it becomes voluntary. They should not divide the workforce, but everyone in the workforce under the umbrella of the SSO. They say they want to provide social security for everyone, but the reality is they still divide it between formal and informal groups. What they set out as a policy statement is not what they do in reality. The issue and purpose of the SSO should be that, how would you raise the standard of living for each individual. Currently you can ask any worker who is part of the SSO and ask if they really do feel secured if they lose their jobs or become disabled. In this sense people would already disagree with having to pay taxes for social security since they do not perceive the system to benefit them in the first place. Especially in the media where it is always portraying the rich running away or avoid paying taxes. The poor would the feel even less of an incentive to be part of social organized groups.



**Sociology:**

Rights and freedoms should be shared by everyone, and fairness is also an important concept. By having both formal and informal groups already shows unfair practices of the state. Government civil servants do not have the luxury of tax evasion, nor certain tax deductibles, where we have to pay the full amount of tax since it is taken from our paychecks. Therefore those who are also part of the system, like formals, have to continually pay taxes, unlike informals, who are rich or poor, do not need to pay the full price of tax fees. Those who are able to avoid their taxes end up being the beneficiaries, in this sense, of social security taxation. This is what hinders the states capabilities of providing sufficient welfare programs for those who really need it. Tax evasion is a serious problem in Thailand, and one of the root causes is setting up policies like the SSO that divides the labor force of those who have to pay and those who don't have to pay. This not only concerns tax contributions made to the SSO by its members, but also other taxes that the state tries to collect. My concern here is the level of fairness provided, that the state should ensure, but does not.

6. *Do you think public services such as social security is adequate for Thai people?*

**Economics:**

Social security office itself is not enough, but as long as you have other social infrastructures, it does provide other alternatives. This is where the various safety nets provided by the state are specific towards the people's needs. Other services such as education is already provided for 12 years, and written in the constitution. The problem with this is the quality of education. Education needs to be a life long effort, where mass communication is required to educate the population with meaningful information. People only go to school for 12 years, who live for another 40 to 50 years, you need more input. Another issue is public housing, rather than centralizing it, extended families, where the young take care of the old, as a positive psychological effect, rather than putting all old age members of society in one place. Community integration, where people of many age groups live amongst each other and help one another.

**Finance:**

Obviously no it isn't adequate.

**Sociology:**

No it is not enough, absolutely not enough. The amount of funds that are allocated for social welfare in Thailand to be given to those who are in need are. As a person who looks after public welfare, we can easily see that funds dispersed in rural areas where it is most needed, does not even fully reach those who need assistance. The only problems that we are able to tackle are the ones that immediately present itself as an issue. But many other concerns that do not show up outstandingly are not addressed. Those who are in need, but are unable to make the public aware of it, does exist. What we are trying to

do now is establishing organizations in each region, to address problems faced by each community, to bring to light their concerns that we are unaware of.

*7. Social security requires high government spending, do you think it's worth it?*

**Economics:**

We will go broke. Compared to other countries in Western Europe, we are much better off, but at the same time we also learn from their experiences with social security spending. That is why the Thai system has a stronger emphasis on savings during a person's working life, than Europeans.

**Political Science:**

Yes it does require high government spending, whether or not it is worth it depends on the programs it is currently running. If the government wishes to fund certain programs, they need the revenue in order to maintain it. It is a tradeoff. This sometimes causes the government to get rid of, or decrease the role of other programs in order to start new ones. This in itself is already detrimental to other functions and responsibilities of the government.

**Law:**



Yes I think it is worth it. Look at France as an example where no matter what type of political party comes to power, be it conservative or socialist, they will always maintain a welfare state. This is where there is no longer a separation between Socialism and Democracy. The two have combined with each other to create a new ideology. This type of system has allowed people the choice of democracy and maintain their dignity through welfare programs. Even if you become unemployed, you will still be supported by the state, and still be able to sustain a certain lifestyle, and hold on to your dignity. This also has to do with social norms, where people need to cooperate with one another in order to achieve this. Those who are wealthy should pay taxes in order to support the lower income groups. The mentality of those in France differs from those in Thailand. People in France already have high wages, and therefore are willing to pay high taxes, in which they can retire early and live off the foregone consumption that they have given to the state. The direction that Thailand needs to move to know is providing sufficient public housing. Making sure electricity and clean water is accessible to everyone in the country. Government policies need to be created in order to maintain the dignity of the general population, first of all by providing free education, health care, and public housing. Of course taxes need to be collected from somewhere to fund these programs. Providing these services should be the primary function of the state.

**Finance:**

I don't think that the government spends that much on social security. This is speaking in terms of the services that are provided by the SSO. It is very difficult to withdraw funds



from the SSO when you as a member go there to claim something. The amount of paperwork, and red tape that is required alone shows the difficulty of extracting funds.

**Sociology:**

For the benefit and sustainability of society, it is worth it. As long as welfare is able to reach everyone as the policy intends, it is advantageous for the well-being of the country's citizens, and the country as a whole. People can actually have comfort in their lives and worry about other things.

8. *In order for the state to provide social security, taxes need to be levied. Do you think Thai people currently pay high or low tax rates for state provided services (social security)?*

**Economics:**

If taxes are too high, people will not pay, and find ways of getting out of paying higher taxes. Education is already universally provided to everyone, so the problem is not there, the problem is the quality of education. Public housing does not require large amounts of investments to provide people with lavish accommodations. Health is also universally provided, but once you go into higher quality of maintenance of good health care the costs will definitely increase. The government has to maintain a reasonable and decent level of living, with people also concerning themselves for this also, but having to begin this from the start. Then I don't think you need to increase taxes. Efficiency is what we

need. Even with the quality of education, where the increase in technology does not require you to have as much qualified teachers anymore; as in the number of students per teacher. Community based activities will cost lesser than centralized government policies.

**Political Science:**

If, with consideration towards the types of services that there are out there, then it is a fair amount. Services provided are not that great, because the taxes paid into them aren't so high. So you get what you pay for.

**Law:**

Thai people on average pay low taxes compared to the services that they are already receiving. Such as the 30 baht health care scheme, where in Thailand, only around 20% of the populations are active persons in paying their taxes. Where compared to the amount of people who use public service is much greater. Therefore the amount of tax revenue the government receives is much lower than those using the services that the state provides. In this case, citizens of Thailand should pay higher taxes in order to move itself into a welfare state. The government needs to improve its ability in collecting taxes, and have tax provisions on many other aspects. Be is inheritance tax, land tax, or other taxes, to create the revenue needed to become a welfare state, would be the only way to survive of the Thai government. Even if Thailand does achieve developed nation status, welfare should still be provided.

**Finance:**



Thai people pay a high tax for the services received. This is with considering that my opinion that the level of services provided is incredibly lacking. For the amount of contributions made to the SSO and the services that are given in return. This however does not have to do with the types of services provided. For example, the topic of privatization, if the government is inefficient and does not know how to operate certain enterprises that the state owns, they shouldn't be doing it in the first place. They should be operated by someone who is more efficient, and has the proper know how. The government's role should be to establish infrastructure required for various sector of enterprises and ensure that it does not collapse, not become the monitor and operator of the entire enterprise. If services are inefficient, and the method of operations by the government is inadequate, especially in the SSO, then they should not be the ones managing it.

**Sociology:**

Thai people compared to other countries, pay a very low tax rate for services provided. There is also the problem of tax evasion where people avoid them, and end up paying very little anyway.

***9. Ministries in Thailand are responsible for various activities of the government.***

***This also comes with discretionary budgets that they are able to use in times of emergency, or allocate as how they see is proper. Do you think funds should be***

*centralized in one point to maintain distribution of government revenue in this sense?*

**Economics:**

There is a need to rationalize some of the spending capabilities of each individual ministry when it comes to discretionary spending. This will also create an automatic monopoly over state budgets. You have to have a program that is more or less automatic for each province. There exists such a program in Thailand for each province, for the allocation of funds for health, education, and others, but still not as effective. The central government provides the funds, but there is no monitoring body that ensures that funds that are dispersed at the provincial level are really being properly allocated. Central government needs to monitor, but not operate it itself.

**Law:**

It is not necessary to have a central budget. If it is this means that each ministry needs to have a representative in which to say how much money they need, and when to receive it. It causes inefficiency when each ministry's project tries to allocate its own funds. If the government has a new policy, it does not have to do much of anything at all. Such as education, where you need to hire the teachers, pay for electricity and water, which is where the government will provide the funds to do so. If anybody wants their children to go study at that school, then just send them there. As for the quality of education, it is the role of the government to ensure the types of teachers that are trained and hired for such positions. In terms of budget allocations and fears of overlapping authorities, Thailand

has begun a new policy, although not fully implemented, is allowing governors more authority in their own provinces. If there is a crisis, that requires the assistance of various ministries, the governor has the authority to request for funds in order to tackle the problems in their provinces.

***10. Do you think social security is a viable tool of the government to drive economic development and growth?***

**Economics:**

Social security is part of consumption forgone by its members. If you do it well it increases the ability of the country to invest for future growth. When you want to do that, you need to have a good investment policy of the people who manage this fund. With no proper direction, fund managers will just invest in the Thai stock market which in its own has limited capabilities. Thailand lacks venture capital needed to build infrastructure, which also yields long term benefits.

**Political Science:**

The subject content that I am knowledgeable in does not cover to the extent of concerning about economic growth or development. Since I am not an economist, my concern is just the welfare of the people. Such a system would increase the welfare of the people, if there is a system and if it works and adequate for the people. But to fully answer in terms of economics if social security causes economic growth and



development, I am not sure. According to Marxist, the purpose of welfare is to increase worker productivity

**Law:**

First of all this policy is already in the constitution. Since it is going to be in the new constitution, it implies that it is now the duty and responsibility of the Thai government to provide such program. It forces the state to establish such an organization and find the funds for it. In terms of providing education, health care, and public housing it is already underway from the previous government. It all depends on whether or not the next government is going to continue establishing such programs. Social security is important to the development of human dignity. People need to have a sense of belonging, and not being left out.

**Finance:**

With current systems in place right now, then no it isn't a tool of the government to achieve economic growth. First of all the people do not feel secure. If they do not feel secure, they will not have a dependency or the willingness to make contributions to the SSO. You need to make people feel secure with the amount of income they will make. Taxi drivers who do not feel secure will drive on for 20 hours a day. If that does happen, then you will end up with more car accidents with drivers who are sleep deprived. Make a simple comparison of the use of services between Thailand and the US. Highways and roadways in the US, they use machines to wash and scrub the streets to make it clean. In Thailand on the motorway they use a whole line of crewmen sweeping the streets right

next to the cars that are going 120 kilometers and hour. It is not because of the cost of labor in this country, but sees how much we value a person's life. The amount of wages we pay them to put their lives in danger. That is how people feel insecure in this country. Thai people have to feel that once they contribute to something in forms of taxes, they have to receive something in return for it. But that is not the case. There are always taxes and fees in Thailand for everything, but the money goes elsewhere, rather than to the services provided to those who pay taxes. Everybody is a free-rider off of everybody else, which does not work, and eventually will fail.

**Sociology:**

Yes I think social security would be a good tool to achieve development in this country. If the government is able to support the SSO and push it to cover everyone and not just only formal groups, then people would receive much needed assistance and guidance which would achieve development.

## Topic Highlights from Interview Questions

### Question 1 – From your perspective, what is the definition of social security?

#### Economics

- Provisions / accommodations of basic necessities, food and shelter when unemployed or unable to work

#### Political Science

- Insurance during rough times, risks, accidents, or financial uncertainty in the future
- Poverty alleviation

#### Public Law

- Duty of the state to provide these services
- Ensures the participation of the people to provide services
- Provide survival and dignity, and basic necessities

#### Finance

- Contribution to safeguard your savings for future usage
- Very small in Thailand due to taxes received and services provided

#### Sociology

- State partially participates in the provision of welfare towards the workforce so that employers will become responsible for the well-being of their employees

### Question 2 – What do you think is the role of social security in Thailand?

#### Economics

- Services provided to only those that contribute
- Agrarian society does not require social security, since families take care of themselves
- Employer and employee relations where wages are paid, and health concern of the worker plays a vital importance to the production capability of that worker
- Unemployment, when worker is dismissed from the workforce
- Women in the workforce, pregnancy and childcare
- Old age pensions are required since the agrarian society no longer exists
- State helps people to save where individuals forego present day consumption in order to maintain future levels of consumption

#### Political Science

- Tripartite regime should cause redistributive effects, where services provided depends on the person's ability to receive income



- If the individual earns high wages, means they pay higher taxes, while the state pays lower portion for them
- If the individual earns low wages, means they pay lower taxes, while the state pays a higher portion for them
- Progressive system

### **Public Law**

- Today's primary function of the government is to provide social services (health care, education, housing, social security)
- Focus is on economic growth which comes from the welfare of its people
- Quality of life must be achieved through the perception of security and ability to work

### **Finance**

- Role is unclear, only know when to collect and tax notices

### **Sociology**

- Rights needed to protect the general workforce
- Provide welfare for employer and employees
- Worker protection and worker's rights, for only the past 16 years

### **Question 3 – Do you think that government is the best entity to judge what types of welfare should be provided?**

#### **Economics**

- Defined benefits – government becomes main investor, with limited knowledge, amount of returns does not make up for services provided or benefits demanded by members, chance of going broke
- Privately managed defined benefits – prevents government from using funds in other projects to cover up cost, more aimed towards return on investments
- Defined contributions – benefits determined by the amount put in by members

#### **Political Science**

- Democracy, laws and institutions must adhere to public opinion
- Government has the ability to decide because it is a function of government and a responsibility

#### **Public Law**

- Duty of the government to provide services, the state has to have the resources available and the structural capabilities in order to provide services
- The average everyday person cannot decide this
- Policy must be set with an idea of what to accomplish, available resources to see it through, and the administrative ability to make it a national policy
- Thailand cannot afford to restart programs that were started by previous governments

**Finance**

- State should be co-sponsor of programs
- Organized by the state, but run by non-government employees
- Incomparable the practice and skill level of bureaucrats and everyday employees
- Level of service needs to be re-evaluated

**Sociology**

- Individuals should know best what it is that they want, not the state
- If that is the case, government's role is simply to provide a framework
  - Set boundaries of responsibilities and duties
- Self reliance, through state initiated programs (starting phase only)
- People would rather receive, than help build
- Provide guidance, not role of initiator and facilitator

**Question 4 – What do you think are the advantages and disadvantages of a government sponsored pension plan?****Economics**

- People are too nearsighted
- Tax incentives to force contributions towards higher savings
- State managed however is inefficient in inflexible when it comes to opportunities
- Gov should be the regulator not the operator
- SSO itself is inefficient where information systems is inadequate to know who is paying and who isn't

**Political Science**

- If the system works, then it is an advantage
- People are farsighted enough to be responsible for their own futures
- Efficiency in management by the state

**Finance**

- Does not make a difference
- Consider the standard of living in Thailand
  - Low wages now, if collected, still has no value 20 years from now for retirement
  - Rural areas however, where cost of living is lower than BKK, then it is possible
- Majority of SSO membership is in Bangkok
- State must be incredibly generous towards human development

**Sociology**

- Sharing of contribution burdens with the tripartite regime
- Central provident fund like Singapore cannot work because Thais have no sense of responsibility sharing

- Should instill a sense of responsibility in employers towards their employees

**Question 5 – The Thai social security system is funded by a tripartite regime. Do you think social security taxes on firms restrain their ability to operate and expand?**

#### **Political Science**

- Depends on the tax rates
- High taxes hinders a firm's ability
- Progressive system should apply here to
  - High income firms pay high taxes
  - Low income firms pay low taxes

#### **Finance**

- Contribution amount that companies pay is very small
- Thais need to understand what the tax is for
- Low tax revenues collected, low service, low efficiency
  - Does not make sense for the member to pay in to them
- If companies see the benefits of paying the contributions then it will be worth it to them
  - Case right now, is it isn't worth it

#### **Sociology**

- Thai fiscal capabilities are very limited
  - Cannot continually suffer the burden to provide certain services
- Worker's welfare should fall on the firms that hire them
  - Lessen the role of the government
- Legislative provisions in the hiring and firing of workers to maintain national employment levels
  - Tax incentives
- Companies and businessmen will always want to avoid taxes

**Question 6 – Thailand divides its workforce into 2 categories. Formal and informal, that is already separated by level of income and work status. This also determines if they pay social security taxes or not. If the purpose of social security is to alleviate poverty and financial burden, does this mean Thailand is targeting the wrong group?**

#### **Economics**

- Social security should be provided for both groups
- Lower income groups still need incentive to save
  - Still live like agrarian society
- Even though informals are not part of the SSO, the state still provides for their needs

#### **Political Science**



- SSO should provide fairness to everyone
- Becomes a comprehensive social security system

#### **Finance**

- Everyone should be under the umbrella of the SSO (should not be voluntary either)
- Policy statement contradicts with reality
- Should be a question of how to increase the standard of living of everyone
  - People do not perceive SSO to provide them with security
  - Therefore they do not want to pay the tax for it

#### **Sociology**

- Rights and freedoms should be shared by everyone including fairness
- Having two groups shows unfairness practice by the state
- Civil servants and formals have no choice but to pay their taxes since it is deducted from their paychecks
  - Informals can easily evade since they don't have a pay check
- Those who avoid paying taxes all together (tax evasion)

### **Question 7 – Do you think public services such as social security is adequate for Thai people?**

#### **Economics**

- The SSO itself is not enough, but other social infrastructures provides alternatives
- Specific safety nets targeted to different groups of people
- Provisions of education from 1<sup>st</sup> grade to 12<sup>th</sup> grade
  - Problem is the quality of education not the provisions of it

#### **Finance**

- No it is not enough

#### **Sociology**

- No it is not enough
- Funds dispersed in rural areas where it is most needed, does not fully reach those who need assistance
- Only short term immediate responses are what we are able to assist in
- Other concerns do not come to our attention due to miscommunication, or the public not shedding light on it for us

### **Question 8 – Do you think Thailand as a developing nation should adopt “welfare state” philosophies like those in France and much of Western Europe?**

#### **Economics**

- We will go broke

- In comparison with other European states we are better off
- we learn from other countries SS systems
- Thailand emphasis more savings during a person's working life time than Europeans

### **Political Science**

- I am for a progressive system
- Welfare state has its perks, but I don't think Thailand will ever reach that stage

### **Public Law**

- Yes Thailand should adopt welfare state philosophies
- Thaksin before the coup already started to move Thailand towards this
- Provisions of universal health care and education that already existed but publicized
- Thailand's relations with the US has made it less prone towards socialist ideals because of a cold war mentality
- Only recently has populist policies started attract the people

### **Finance**

- Depends on the policies the state is trying to start
- Welfare state requires a certain type of mentality (willing to pay for the better good)
- Contributions to the SSO does not yield positive returns to the view of its members
- Mentality all wrong for Thai people, they do not see the benefits of paying a higher tax

### **Sociology**

- Thailand lacks discipline and mentality of sacrifice, or one's duty
- Welfare state countries have income tax rates of 45%
- Thailand lacks order, therefore welfare state would be difficult
  - Consider the amount of people who avoid taxes
- Thais do not see the benefit of sacrificing for the better good of the whole
  - Sacrifice today, for betterment of tomorrow

### **Question 9 – Social Security requires high government spending, do you think its worth it?**

#### **Political Science**

- It is a tradeoff
- Funding many projects at the same time requires high government spending
  - Increasing programs means other programs need to stop, or taxes must increase in order to maintain them

#### **Public Law**

- Yes it is worth it
- France as an example, no matter what political ideology comes to power, always maintains the welfare state

- Allowance for the choice of democracy and maintain their dignity through welfare programs
- Social norms requires people to cooperate with one another
  - Rich pay for the poor
- Thailand needs to ensure that public services at all levels reaches the masses that is the primary function of the state

### **Finance**

- The state does not spend that much on SS anyway
- In terms of services provided
  - Withdrawing funds is difficult with a lot of red tape
  - Hospitals complain about late payments to SSO patients

### **Sociology**

- If it benefits and provides sustainability of society, yes it is worth it
- As long as welfare reaches those it intends to, then it is worth it
- People can have comfort in their lives and worry about other things

**Question 10 – In order for the state to provide social security, taxes need to be levied. Do you think Thai people currently pay high or low tax rates for state provided services (social security)?**

### **Economics**

- Tax rates too high, people will find ways to avoid them
- Education and health care is already universal
- Public housing does not require high levels of investments for lavish accommodations
- Proper maintenance is required, which will increase costs
- State has to maintain a decent and reasonable level of living standards
  - That way taxes do not need to be increased for current service betterments
- Efficiency can sometimes overcome higher qualities

### **Political Science**

- It is a fair amount with consideration of the level of services that are currently existing
- You get what you pay for

### **Public Law**

- Thai people on average pay a low tax
  - Low tax compared to the programs already existing
- 20% of population are active tax payers
  - Compared to the amount of people using those services, is much greater
- Tax revenue received is lower than those using these services
- Paying a higher tax would enable the government to finance programs and services and move into a welfare state



- State needs to improve ability in tax collection

#### **Finance**

- Thai people pay a high tax for services received
- If the government is inefficient, they should have someone else to do it who is better
- Government's role is to establish infrastructure not compete against the market
  - Make sure the market does not collapse
- Method of operations is inadequate, especially in the SSO
  - SSO should not be managing the fund

#### **Sociology**

- Compared to other countries, Thais pay a very low tax rate for services provided
- Tax evasion is a problem, and when it does happen, cost of paying taxes is even lower

### **Question 11 – Do you think social security is a viable tool of the government to drive economic development and growth?**

#### **Economics**

- SS is consumption forgone by members
- It increases the ability of the country to invest for future growth
  - Need to have a good investment policy and those to manage the fund
- Thailand lacks venture capital needed to build infrastructure

#### **Political Science**

- Not knowledgeable in the field of economics
- SS however increases the welfare of its people
- According to Marxist, welfare is used to increase worker productivity

#### **Public Law**

- The SS policy is already in the constitution
  - Forces the state to establish an organization and find the funds for it
- Social security is important to the development of human dignity
  - People need a sense of belonging

#### **Finance**

- The current SSO, no it does not drive economic growth
  - People currently do not feel secure
  - Insecurity, less dependency on the system, unwilling to pay taxes
- Thais need to feel that if they contribute through taxes, they will receive something in return for it
- Everybody in Thailand is a free rider off of everyone else

#### **Sociology**

- Yes it would be a good tool

- State must push it to cover everyone and not to leave other people
  - People will then receive more assistance and guidance to achieve development

## APPENDICES C

### Empirical Evidence for Comparative Study

#### National Savings Calculations - Thailand

Annua lly	Total GDP (in millions baht)	Private Consumption in Domestic Markets (in millions Baht)	Government Collected Taxes (in millions baht)	Savings (in millions baht)
1986	1,133,400.00	781,928.00	146,260.90	205,211.10
1987	1,299,910.00	857,049.00	176,141.70	266,719.30
1988	1,559,800.00	948,614.00	224,936.50	386,249.50
1989	1,856,990.00	1,054,050.00	279,591.30	523,348.70
1990	2,183,550.00	1,166,900.00	359,226.00	657,424.00
1991	2,506,640.00	1,224,200.00	425,291.70	857,148.30
1992	2,830,910.00	1,327,820.00	452,671.50	1,050,418.50
1993	3,165,220.00	1,433,090.00	534,841.00	1,197,289.00
1994	3,629,340.00	1,531,880.00	625,371.90	1,472,088.10
1995	4,186,210.00	1,676,660.00	731,452.50	1,778,097.50
1996	4,611,040.00	1,785,160.00	808,631.80	2,017,248.20
1997	4,732,610.00	1,763,130.00	807,882.10	2,161,597.90
1998	4,626,450.00	1,590,480.00	731,023.90	2,304,946.10
1999	4,637,080.00	1,653,220.00	691,597.70	2,292,262.30
2000	4,922,730.00	1,741,860.00	727,078.10	2,453,791.90
2001	5,133,500.00	1,807,920.00	784,386.50	2,541,193.50
2002	5,450,640.00	1,909,570.00	863,949.60	2,677,120.40
2003	5,917,368.00	2,021,966.00	1,002,509.30	2,892,892.70
2004	6,489,847.00	2,156,618.00	972,073.30	3,361,155.70
2005	7,087,660.00	2,238,493.00	1,254,802.90	3,594,364.10
2006	7,816,474.00	2,332,030.00	1,468,936.70	4,015,507.30



**National Savings (NS) Correlation with Social Security and Welfare Budget (SSWB) - Thailand**

Annually	Savings (in millions baht)	Social Security and Welfare Budget (in millions Baht)
1986	205,211.10	6,027.60
1987	266,719.30	6,401.60
1988	386,249.50	7,792.60
1989	523,348.70	8,676.60
1990	657,424.00	10,224.10
1991	857,148.30	12,314.20
1992	1,050,418.50	14,410.00
1993	1,197,289.00	18,954.20
1994	1,472,088.10	22,375.70
1995	1,778,097.50	27,016.40
1996	2,017,248.20	35,972.80
1997	2,161,597.90	40,804.90
1998	2,304,946.10	34,047.60
1999	2,292,262.30	36,544.70
2000	2,453,791.90	46,101.10
2001	2,541,193.50	51,533.10
2002	2,677,120.40	70,781.00
2003	2,892,892.70	76,244.20
2004	3,361,155.70	108,278.00
2005	3,594,364.10	85,975.90
2006	4,015,507.30	95,559.50

Correlation = 0.94311

### Correlation Between SSWB and Total GDP: Thailand

Annually	Social Security and Welfare Budget (in millions Baht)	Total GDP THB Mn
1986	6,027.60	1,133,400.00
1987	6,401.60	1,299,910.00
1988	7,792.60	1,559,800.00
1989	8,676.60	1,856,990.00
1990	10,224.10	2,183,550.00
1991	12,314.20	2,506,640.00
1992	14,410.00	2,830,910.00
1993	18,954.20	3,165,220.00
1994	22,375.70	3,629,340.00
1995	27,016.40	4,186,210.00
1996	35,972.80	4,611,040.00
1997	40,804.90	4,732,610.00
1998	34,047.60	4,626,450.00
1999	36,544.70	4,637,080.00
2000	46,101.10	4,922,730.00
2001	51,533.10	5,133,500.00
2002	70,781.00	5,450,640.00
2003	76,244.20	5,917,368.00
2004	108,278.00	6,489,847.00
2005	85,975.90	7,087,660.00
2006	95,559.50	7,816,474.00

Correlation = 0.9362

**Gross Domestic Product – Per Capita (Chulalongkorn University CEIC Database)**

**Thailand**

Thailand		
Annually	GDP Per Capita (THB)	GDP Per Capita % Change
1986	21,953.00	5.7
1987	24,790.00	12.9
1988	29,278.00	18.1
1989	34,345.00	17.3
1990	39,822.00	15.9
1991	45,053.00	13.1
1992	50,216.00	11.5
1993	42,595.00	-15.2
1994	45,867.00	7.7
1995	49,523.00	8
1996	51,920.00	4.8
1997	50,702.00	-2.3
1998	44,929.00	-11.4
1999	46,468.00	3.4
2000	48,339.00	4
2001	49,046.00	1.5
2002	51,265.00	4.5
2003	54,484.00	6.3
2004	57,416.00	5.4
2005	59,468.00	3.6
2006	62,003.00	4.3



**Gross Domestic Product – Per Capita (Chulalongkorn University CEIC Database)**

**Singapore**

Singapore		
Annually	GDP Per Capita (SGD)	GDP Per Capita % Change
1986	14,345.00	0.45
1987	15,613.00	10.49
1988	17,975.00	18.09
1989	20,040.00	14.81
1990	21,915.00	13.69
1991	23,785.00	11.67
1992	25,067.00	8.6
1993	28,360.00	16.04
1994	31,575.00	14.88
1995	33,897.00	10.66
1996	35,552.00	9.23
1997	37,498.00	9.07
1998	35,115.00	-3.12
1999	35,371.00	1.54
2000	39,683.00	14.15
2001	37,014.00	-4.18
2002	37,762.00	2.96
2003	38,434.00	2.03
2004	42,833.00	12.83
2005	44,738.00	7
2006	46,832.00	8.11

**International Openness (United Nations Common Database)**

Thailand		International Openness		
Annually	Export (THB mn)	Import (THB mn)	Total GDP (THB mn)	Ratio ((X+M)/GDP)
1986	231,481.00	246,580.00	1,133,400.00	0.42
1987	298,099.00	342,227.00	1,299,910.00	0.49
1988	399,167.00	500,418.00	1,559,800.00	0.58
1989	509,925.00	650,101.00	1,856,990.00	0.62
1990	583,206.00	838,342.00	2,183,550.00	0.65
1991	720,545.00	967,808.00	2,506,640.00	0.67
1992	815,202.00	1,020,582.00	2,830,910.00	0.65
1993	921,433.00	1,143,108.00	3,165,220.00	0.65
1994	1,118,049.00	1,344,831.00	3,629,340.00	0.68
1995	1,381,660.00	1,755,451.00	4,186,210.00	0.75
1996	1,378,902.00	1,796,549.00	4,611,040.00	0.69
1997	1,789,833.00	1,874,598.00	4,732,610.00	0.77
1998	2,181,082.00	1,677,953.00	4,626,450.00	0.83
1999	2,150,049.00	1,800,131.00	4,637,080.00	0.85
2000	2,730,943.00	2,513,501.00	4,922,730.00	1.07
2001	2,802,530.00	2,691,579.00	5,133,500.00	1.07
2002	2,837,663.00	2,719,439.00	5,450,640.00	1.02
2003	3,233,116.00	3,077,529.00	5,917,368.00	1.07
2004	3,822,802.00	3,764,009.00	6,489,847.00	1.17
2005	4,399,824.00	4,737,801.00	7,087,660.00	1.29
2006	4,849,248.00	4,769,493.00	7,816,474.00	1.23

**International Openness Cont'd (United Nations Common Database)**

Singapore				
International Openness (SGD)				
Annually	Export (SGD Mn)	Import (SGD Mn)	Total GDP (SGD mn)	Ratio ((X+M)/GDP)
1986	48,986.00	55,545.00	39,210.00	2.67
1987	60,266.00	68,415.00	43,322.00	2.97
1988	79,051.00	88,227.00	51,158.00	3.27
1989	87,116.00	96,864.00	58,736.00	3.13
1990	95,206.00	109,806.00	66,778.00	3.07
1991	101,880.00	114,195.00	74,570.00	2.90
1992	103,351.00	117,530.00	80,984.00	2.73
1993	119,473.00	137,603.00	93,971.00	2.74
1994	147,327.00	156,396.00	107,957.00	2.81
1995	167,515.00	176,314.00	119,470.00	2.88
1996	176,272.00	185,183.00	130,502.00	2.77
1997	185,613.00	196,605.00	142,341.00	2.69
1998	183,763.00	169,864.00	137,902.00	2.56
1999	194,290.00	188,142.00	140,022.00	2.73
2000	237,826.00	232,175.00	159,840.00	2.94
2001	218,026.00	207,692.00	153,165.00	2.78
2002	223,901.00	208,312.00	157,694.00	2.74
2003	251,096.00	222,811.00	160,890.00	2.95
2004	335,615.00	293,338.00	181,540.00	3.46
2005	382,532.00	333,191.00	194,242.00	3.68
2006	431,559.00	378,924.00	209,991.00	3.86



**Inflation Rate – Calculated from CPI (Chulalongkorn University CEIC Database)**

**Thailand**

Thailand				
Annually	Consumer Price Index	Inflation	Total GDP THB Mn	% Change of Total GDP
1985	53.12		1,056,500.00	
1986	54.1	1.84%	1,133,400.00	7.28%
1987	55.45	2.50%	1,299,910.00	14.69%
1988	57.56	3.81%	1,559,800.00	19.99%
1989	60.64	5.35%	1,856,990.00	19.05%
1990	64.27	5.99%	2,183,550.00	17.59%
1991	67.93	5.69%	2,506,640.00	14.80%
1992	70.69	4.06%	2,830,910.00	12.94%
1993	73.07	3.37%	3,165,220.00	11.81%
1994	76.8	5.10%	3,629,340.00	14.66%
1995	81.25	5.79%	4,186,210.00	15.34%
1996	86.02	5.87%	4,611,040.00	10.15%
1997	90.78	5.53%	4,732,610.00	2.64%
1998	98.15	8.12%	4,626,450.00	-2.24%
1999	98.46	0.32%	4,637,080.00	0.23%
2000	100	1.56%	4,922,730.00	6.16%
2001	101.57	1.57%	5,133,500.00	4.28%
2002	102.25	0.67%	5,450,640.00	6.18%
2003	104.12	1.83%	5,917,368.00	8.56%
2004	106.96	2.73%	6,489,847.00	9.67%
2005	109.33	2.22%	7,087,660.00	9.21%
2006	114.408	4.64%	7,816,474.00	10.28%

**Inflation Rate – Calculated from CPI (Chulalongkorn University CEIC Database)**  
**Singapore**

Singapore				
Annually	Consumer Price Index	Inflation Rate	Total GDP SGD Mn	% Change of Total GDP
1985	78.85		39,036.00	
1986	77.79	-1.34%	39,210.00	0.45%
1987	78.17	0.49%	43,322.00	10.49%
1988	79.38	1.55%	51,158.00	18.09%
1989	81.28	2.39%	58,736.00	14.81%
1990	84.05	3.41%	66,778.00	13.69%
1991	86.98	3.49%	74,570.00	11.67%
1992	88.95	2.26%	80,984.00	8.60%
1993	91.09	2.41%	93,971.00	16.04%
1994	93.9	3.08%	107,957.00	14.88%
1995	95.53	1.74%	119,470.00	10.66%
1996	96.89	1.42%	130,502.00	9.23%
1997	98.79	1.96%	142,341.00	9.07%
1998	98.61	-0.18%	137,902.00	-3.12%
1999	98.71	0.10%	140,022.00	1.54%
2000	100	1.31%	159,840.00	14.15%
2001	100.98	0.98%	153,165.00	-4.18%
2002	100.59	-0.39%	157,694.00	2.96%
2003	101.08	0.49%	160,890.00	2.03%
2004	102.76	1.66%	181,540.00	12.83%
2005	100.44	-2.26%	194,242.00	7.00%
2006	101.417	0.97%	209,991.00	8.11%

**Net Barter Terms of Trade – Ratio of Export to Import Price Indices  
(World Perspective Monde)**

Annually	Net Barter (Singapore)	Net Barter (Thailand)
1986	122	139
1987	117	129
1988	115	126
1989	114	121
1990	116	118
1991	113	117
1992	110	118
1993	109	119
1994	106	119
1995	104	116
1996	105	111
1997	105	112
1998	105	108
1999	103	109
2000	100	100
2001	95.9	93.2
2002	94.4	94.9
2003	90.7	99
2004	89.4	98
2005	86.8	92.8
2006	90.3	96.175



**Calculated Natural Log of "Other Expenditures" Categorized by Expenditure Variables (Thailand)**

Annually	LnHI <sub>Ot</sub>	LnEd <sub>Otr</sub>	LnSW <sub>Otr</sub>	LnNSD <sub>Otr</sub>	LnOtr <sub>Exp</sub>
1986	8.30	8.15	8.32	8.32	8.01
1987	8.33	8.18	8.35	8.35	8.04
1988	8.38	8.23	8.40	8.40	8.08
1989	8.53	8.40	8.55	8.54	8.25
1990	8.68	8.53	8.70	8.68	8.37
1991	8.82	8.65	8.83	8.80	8.47
1992	8.97	8.82	8.99	8.99	8.66
1993	9.15	8.99	9.17	9.16	8.81
1994	9.25	9.09	9.27	9.25	8.89
1995	9.37	9.22	9.39	9.37	9.01
1996	9.53	9.36	9.54	9.51	9.13
1997	9.67	9.49	9.68	9.65	9.26
1998	9.47	9.26	9.50	9.48	8.99
1999	9.45	9.24	9.48	9.47	8.98
2000	9.48	9.26	9.50	9.51	8.99
2001	9.53	9.33	9.55	9.56	9.05
2002	9.65	9.47	9.64	9.66	9.19
2003	9.62	9.42	9.61	9.66	9.17
2004	9.77	9.59	9.73	9.81	9.33
2005	9.78	9.61	9.78	9.83	9.36
2006	9.90	9.73	9.90	9.93	9.46

**Calculated Natural Log of “Other Expenditures” Categorized by Expenditure Variables (Singapore)**

Annually	LnHIOtr	LnEdOtr	LnNDOtr	LnOtrExp
1990	7.69	7.48	7.72	7.33
1991	7.77	7.55	7.80	7.42
1992	7.82	7.53	7.85	7.39
1993	7.86	7.66	7.90	7.52
1994	7.89	7.68	7.93	7.52
1995	7.98	7.77	8.02	7.63
1996	8.08	7.87	8.11	7.76
1997	8.25	8.07	8.30	7.96
1998	8.16	7.96	8.21	7.84
1999	8.11	7.93	8.16	7.83
2000	8.40	8.22	8.44	8.13
2001	8.31	8.10	8.36	7.97
2002	8.35	8.15	8.42	8.01
2003	8.33	8.13	8.40	7.98
2004	8.35	8.15	8.43	7.98
2005	8.39	8.20	8.45	8.06
2006	8.51	8.31	8.56	8.17



## Data Collection for Regression – Thailand

Annually	% Δ GDP	LnGDP /Cap	LnTtlGov Exp	LnHlth Exp	LnEdu Exp	Ln SSWB	LnNSD Exp	LnOtr Exp	Intl Opn	Infl Rate	Nt Brt
1986	7.28	10	8.35	5.3	6.65	4.76	4.96	8.01	0.42	1.84	139
1987	14.69	10.12	8.38	5.34	6.67	4.81	4.97	8.04	0.49	2.5	129
1988	19.99	10.28	8.43	5.41	6.72	4.99	5.06	8.08	0.58	3.81	126
1989	19.05	10.44	8.58	5.56	6.78	5.09	5.23	8.25	0.62	5.35	121
1990	17.59	10.59	8.73	5.69	7.01	5.24	5.65	8.37	0.65	5.99	118
1991	14.8	10.72	8.86	5.73	7.22	5.41	5.95	8.47	0.67	5.69	117
1992	12.94	10.82	9.02	6.02	7.34	5.56	5.68	8.66	0.65	4.06	118
1993	11.81	10.66	9.21	6.23	7.56	5.82	6.19	8.81	0.65	3.37	119
1994	14.66	10.73	9.3	6.34	7.67	5.97	6.43	8.89	0.68	5.1	119
1995	15.34	10.81	9.43	6.55	7.76	6.15	6.62	9.01	0.75	5.79	116
1996	10.15	10.86	9.58	6.64	7.97	6.43	6.95	9.13	0.69	5.87	111
1997	2.64	10.83	9.72	6.81	8.15	6.54	7.08	9.26	0.77	5.53	112
1998	-2.24	10.71	9.54	6.91	8.15	6.35	6.77	8.99	0.83	8.12	108
1999	0.23	10.75	9.53	6.92	8.15	6.41	6.59	8.98	0.85	0.32	109
2000	6.16	10.79	9.56	6.96	8.2	6.63	6.6	8.99	1.07	1.56	100
2001	4.28	10.8	9.61	7.04	8.19	6.74	6.57	9.05	1.07	1.57	93.2
2002	6.18	10.84	9.72	7.01	8.19	7.05	6.87	9.19	1.02	0.67	94.9
2003	8.56	10.91	9.69	6.94	8.24	7.11	6.19	9.17	1.07	1.83	99
2004	9.67	10.96	9.83	7.03	8.3	7.46	6.07	9.33	1.17	2.73	98
2005	9.21	10.99	9.85	7.26	8.34	7.22	6.13	9.36	1.29	2.22	92.8
2006	10.28	11.03	9.97	7.38	8.45	7.32	6.69	9.46	1.23	4.64	96.18



**Data Collection for Regression – Singapore**

Annually	% Δ GDP	LnGDP /Cap	LnTtlGov Exp	LnHlth Exp	LnEdu Exp	LnNtnl Devl	LnOtr Exp	Int Opn	Infl Rate	Nt Brt
1990	13.69	9.99	7.76	5.02	6.36	4.4	7.33	3.07	3.41	116
1991	11.67	10.08	7.83	5.05	6.42	4.45	7.42	2.9	3.49	113
1992	8.6	10.13	7.88	5.09	6.65	4.41	7.39	2.73	2.26	110
1993	16.04	10.25	7.93	5.27	6.5	4.42	7.52	2.74	2.41	109
1994	14.88	10.36	7.96	5.37	6.58	4.57	7.52	2.81	3.08	106
1995	10.66	10.43	8.05	5.28	6.65	4.63	7.63	2.88	1.74	104
1996	9.23	10.48	8.14	5.28	6.68	4.32	7.76	2.77	1.42	105
1997	9.07	10.53	8.32	5.58	6.81	4.27	7.96	2.69	1.96	105
1998	-3.12	10.47	8.22	5.5	6.77	4.12	7.84	2.56	-0.18	105
1999	1.54	10.47	8.17	5.41	6.63	4.04	7.83	2.73	0.1	103
2000	14.15	10.59	8.46	5.51	6.88	4.37	8.13	2.94	1.31	100
2001	-4.18	10.52	8.38	5.68	6.97	4.5	7.97	2.78	0.98	95.9
2002	2.96	10.54	8.44	5.97	7.04	4.49	8.01	2.74	-0.39	94.4
2003	2.03	10.56	8.42	5.97	7.05	4.58	7.98	2.95	0.49	90.7
2004	12.83	10.67	8.45	6.09	7.1	4.52	7.98	3.46	1.66	89.4
2005	7	10.71	8.47	5.96	7.05	4.43	8.06	3.68	-2.26	86.8
2006	8.11	10.75	8.59	6	7.17	4.92	8.17	3.68	0.96	90.3

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