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A Socialist Market Economy in North Korea? Systemic Restrictions and a Quantitative Analysis¹

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Abstract:

The paper deals with the question of economic reforms in North Korea. In the first, theoretical part, it is attempted to highlight the serious restrictions for a clear-cut decision between the old system of state-controlled procurement and distribution on one side and a market economy on the other, offering a hybrid solution to the occurring dilemma. In the second part, the price reforms of July 2002 are analyzed quantitatively as an empirical case study, including their impact on purchasing power, savings, fiscal policy, inflation and their distributive effects. This factual evidence is supplemented by a third part, in which the theoretical and ideological attempts of North Korea to bring the changes in line with its official ideology are explored. In the final analysis, the price reforms are put in the context of a broad North Korean reform initiative, resulting in important policy implications for the international community.

Introduction

The Democratic People's Republic of Korea (North Korea) now is not only in the center of interest of some area specialists, but increasingly becomes a matter of concern for a broader audience due to its relationship with the USA and the possible implications of its nuclear program for

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security in the North East Asian region. The lack of reliable data makes any substantial analysis, and even more so quantitative research on North Korea very hard at best. It is therefore a rare exception that with the announcement of a change in the country's price system, effective from July 1st, 2002, we possess raw data that can be processed. Quantitative analysis is in itself a dangerous undertaking, since - depending on the chosen approach - very diverse and potentially wrong results can be produced while implying a very high degree of correctness. In the case of North Korea, we in addition to that also face the universal problem of data reliability to an extraordinary degree.

Since the developments in the PR China and Vietnam we know that in so-called socialist countries, economic reforms aiming at introducing certain elements of a market economy can indeed be successfully introduced - success being defined by the generation of growth while simultaneously maintaining the political system. Looking at the Democratic People's Republic of Korea (DPRK or North Korea), the big question is whether a similar reform movement can be started there as well, eventually leading towards a socialist market economy. Evidence indicates that this process has been initiated already. It also suggests that the reform might now be in a critical stage where the West can decide about its success or failure.

So, has North Korea started to reform? Why? How? And to what end? These are the questions this article seeks to answer.

Part 1: Introducing the Market - A North Korean Dilemma

Let us take a look at how a market for a good like rice, or food in general, would function according to basic economic theory.

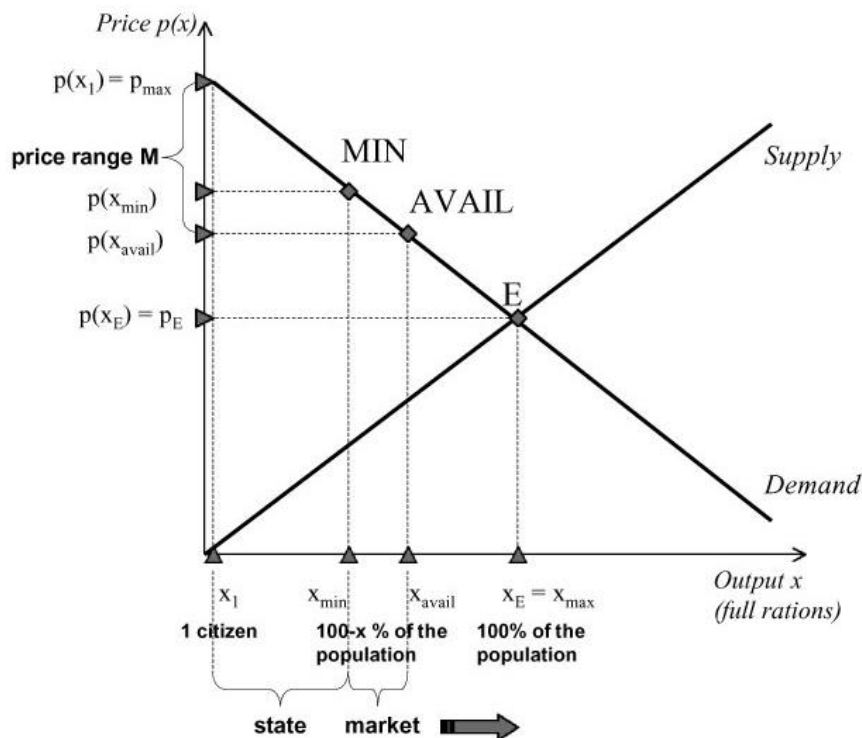


Chart 1: Food distribution in case of undersupply

In a functioning market, producers increase their output by various means² as long as they can sell their products at a price higher than their costs, which means that they would only stop producing beyond an output of x_E (see supply curve). Consumers would be ready to spend money on the product according to their income or preferences (see demand curve); for an ordinary good, that means that a few are willing to pay a high price and many are ready to pay a low price. The intersection of the two curves of demand and supply marks the equilibrium E where a certain quantity of the good (x_E) is sold at a certain price (p_E). The equilibrium on the output side (x_E) marks the amount of full rations for 100% of the population; full rations means that people can buy and eat as much as they WANT, which is usually more than they NEED to stay alive³.

What happens in a free market, if the total output is below the equilibrium point as marked by x_E ? In that case, less than 100% of the population would be able to buy full rations. If, for example, the output is x_{avail} , only those consumers who can pay a price within price range M (between p_{max} and p_{avail}) will be able to buy full rations. They would hardly buy less, so the remaining consumers who are not able to pay a price above p_{avail} end up with no food at all and die, probably attempting an uprising before that happens.

Traditionally, in North Korea these market signals did not play any role. Therefore, the obviously low output (less than x_E) could be handled, which would be impossible in a market economy. The state simply distributed all the available food (no matter where it came from) more or less equally among all citizens, resulting in non-full rations for everybody excluding a relatively tiny elite minority. Such a system means malnutrition etc., but no visible division of the society in eaters and starvers; it prevents subsequent uprisings and might keep most people alive, even though still hungry, as long as the non-full rations are still sufficiently large to keep people alive (sufficient rations, marked by the output range from x_1 to x_{min}).

The problem is, however, that under such circumstances there are no market signals to the producers to increase their output, so that undersupply and non-full rations become a permanent phenomenon. In addition, there is always the risk that if the situation worsens due to natural disasters, other external and internal shocks or simply mismanagement, there might be a moment when the output level might fall below x_{min} and even by equally distributing all available food, the single rations will be non-sufficient. In that case, something similar to the discrimination by the market would have to be introduced by the state, i.e. certain groups of people would receive sufficient rations, while others would not and subsequently had to die. The state would design this discrimination in a way to reward loyalty and secure its own survival including domestic political stability, which means that the military, the police, the cadres and their families would be treated preferentially⁴. It is very likely that exactly this case - output level fell under x_{min} - happened when North Korea experienced the famine of 1995 and the following years.

Obviously and catalyzed by the new situation after the dissolution of the Soviet Union and the Eastern Block, alternative incentives such as threat, mass campaigns like the Ch'öllima-Movement, new management forms as the Ch'öngsanri-Method etc. (both see art. 13 of the 1998 constitution) have failed after intensive testing in the last decades. It appears that the North Korean

² like working harder, investing in machines or fertilizer, hiring additional labor, inventing new technologies etc.

³ The same is true for heating; it might be possible to survive at a room temperature of 15 C, but 23 C will be more desirable for most consumers. Hardly anyone would buy heating to reach 40 C or higher.

⁴ It can be assumed that this happens anyway; however, as long as (1) the difference in the size and quality of food rations remains within a certain range and (2) all others receive at least sufficient rations, the probability of protests and other reactions remains relatively low.

leadership has come to the conclusion that the necessary incentives can only come from the market. And indeed, in addition to the (farmer's) markets, in the already mentioned 1998 constitution we find a number of references to issues like "kitchen gardens" (t'öbat'; art. 24), "costs, prices and profits" (wönga, kagyöök, suiksöng; art. 33), and special economic zones (art. 36).

However, with the introduction of a market mechanism, the state would find itself in a serious dilemma: A functioning market would lead to the described disastrous results, that is a certain percentage eats, the others don't eat at all. This is unacceptable to the North Korean leadership for many reasons, among them regime security. On the other hand, the signals from the market are badly needed to increase production. To further complicate the situation, these signals are connected to a time lag - they will not create immediate results, it will rather take time for the producers to receive the signals, to react, and finally to increase the output. In North Korea, there is usually only one harvest of basic crops like rice, corn and potatoes per year, so it might well take two, three or more years after the introduction of a market system to produce the desired outcomes.

The solution to this dilemma is a two-tier or hybrid system: Have markets on one hand, but still provide state-led distribution on the other. This is how we can interpret statements like the one in the 2003 New Year Joint Editorial: "We should manage and operate the economy in such a way as to ensure the largest profitability while firmly adhering to the socialist principles." (PEOPLE'S KOREA 2003a)

Under such a hybrid system, the state distributes a certain amount of the available food evenly (at least as much as x_{\min}), securing the survival of all. However, the state does not distribute all of the available output (x_{avail}), but allows the difference between x_{\min} and x_{avail} to be handled by the market. Here, those few who do have the necessary funds to buy additional food on a market have a chance to upgrade their sufficient rations to full rations⁵.

The result is still discrimination and a segregation of the society, but a less extreme and painful one; the market has a chance to develop and to send signals to producers, who will eventually react and increase production until no consumer is ready to pay prices above the equilibrium price p_E - which is when the optimum output of x_E is reached and everybody gets full rations. The preferential treatment of certain groups within the society can now be handled in the same indirect way as we know it from other societies - these groups receive more money to allow them to buy more goods on the market, rather than receiving higher rations. We would expect a policy that introduces different incomes for various professions, and in general increases the purchasing power of selected societal groups. As will be shown later, it might rightfully be assumed that such redistributive effects were indeed one of the goals of the July 2002 price reforms.

The hybrid system as of above means, however, that the state needs to have enough food to distribute (at least x_{\min}). If the domestic output procured by the state plus international contributions⁶ is too low to allow for the distribution of a sufficient ration per citizen, the state has no other choice but to divert a certain amount of rice away from the private market back under its control until the distribution of a sufficient ration for everybody is guaranteed again. For external observers, this will look like a reduction of the role of private markets - but not like their destruction. It is

⁵ As a result, the demand curve (see graph 1) would move left, since the state-distributed output between x_1 and x_{\min} would be evenly distributed among all consumers, reducing the individual's demand. A full-fledged market would emerge for the remaining output (the difference between x_{\min} and x_{avail}), with the equilibrium price between p_{\max} and p_E .

⁶ It does not matter whether these rations are distributed by the state or donor organizations, as long as the distribution takes place on an equitable and non-discriminatory basis.

remarkable that this is yet another of the observations which can be discerned from an analysis of the price changes of July 2002.

As a matter of fact, in the early 1990s so-called farmer's markets (*nongmin sijang*) have been introduced and tolerated by the state. The constitution, amended in 1998, retains the demand that "means of production are owned only by the state and ... cooperative organizations" (art. 20), but it also allows and guarantees private property, such as "the products of individual sideline activities including those from the kitchen gardens of cooperative farmers and income from other legal economic activities" (art. 24). On April 1st, 2003, Ch'oe Hong-kyu, a director general (*kukjang*) of North Korea's State Planning Commission declared in an interview:

Since the end of March (2003), the farmer's markets, which exist in each of P'yŏngyang's districts, are called markets. The name was changed to acknowledge the fact that not only agricultural products are traded there, but also various kinds of industrial goods. (KIM 2003)

Part 2: Prices in North Korea⁷

Prices usually send important signals to both producers and consumers. We have briefly examined how this functions in a market economy, where competition leads to an equilibrium of demand and supply - or something close to it - and determines the produced amount and the price at which this output is sold. In an orthodox socialist economy, supply and a large part of the demand are controlled by the state, and competition is excluded per se, since it is assumed that on the domestic level, class antagonism has been overcome and therefore cooperative relations within the society are the rule. However, even in a socialist economy, prices need to be set in a manner that at least the production costs are covered, even though not necessarily for every single production unit, but for their entirety. This usually happens based on data provided to the planning agency by the various production and distribution facilities. If prices of certain goods - usually covering basic needs such as food and housing - for political reasons have to be particularly low, subsidies would be used to achieve this result. A mark-up on so-called luxury goods like cars, electronics products etc. or simply a hidden redistribution of state revenue would balance the losses⁸. So, even in a socialist economy, prices have their role, although not the same as in a market economy.

However, under certain conditions, serious distortions in the price system leading to a negation of the role of prices altogether can exist in a socialist economy for a long time without causing a breakdown, as long as the domestic economy remains a closed system, i.e. isolated from the international market, and if planners do not really care about the correctness of the numbers they receive and process. If we look at the history of economic planning in the DPRK, there are phases of severe adjustments after almost every standard plan period⁹, which in fact renders all of the country's neat and detailed economic planning questionable. Since 1996, no economic plan whatsoever has been announced (NAM 2001a). And still, the economy functions, however badly. There were many reasons for it to collapse in the past, but it didn't - so what has changed to induce a reform in the long distorted price system, as it is described and analyzed in this chapter?

⁷ For a paper on the issue of price changes in North Korea, see Noland (2002); it is, however, based on different raw data.

⁸ For a detailed review of the mechanisms of a socialist economy, see Kornai (1992).

⁹ The 1st 7-Year-Plan (1961-1967) was extended by three years; the 6-Year-Plan (1971-1976) was extended by two years; the 2nd 7-Year-Plan (1978-1984) was extended by two years; the 3rd 7-Year-Plan (1987-1993) was followed by a three year intermediate period until 1996 (Nam 2001a).

Problems for a non-market economy as depicted above arise, when for whatever reasons prices start to matter on the domestic scene, and/or when the isolation of the national economy is to be broken. Both could in fact be true for North Korea. A number of recent announcements point into the direction of a dramatic reform of the economic system. The very idea of functioning prices, of demand, supply, profit and of benefiting disproportionately according to the individual input is revolutionary, if contrasted with the egalitarian claim of former economic policy models in North Korea. As shown above, first hints on such a change are already contained in the 1998 constitution.

A side note: There are interesting implications of such a policy. If people are allowed to benefit differently, the more productive ones either receive barely enough to cover their basic needs, which means that others would not be able to do so - an option that is impracticable in the long run. The other and more realistic variant is that the more productive citizens receive MORE than they need, which would allow them to accumulate private capital or, in Marx's terms, value added (*Mehrwert*). This, however, is one of the very roots of a capitalist society¹⁰ and threatens the whole construction of the highly ideologized political system. The excess income as an incentive for hard work or more effective resource allocation only makes sense if there are chances to spend it, in the first place for consumption, but in the long run also for investment - especially if a productivity increase is the goal of economic policymakers. The latter over time leads to private property of production facilities (*Privateigentum an Produktionsmitteln*), which is (currently) explicitly prohibited by the DPRK's constitution¹¹. It remains to be seen when, whether and how this legal problem will be handled; the PR China might very well be an example here.

Introducing the Price Reforms

Let us now briefly analyze the major points of the semi-official article, in which the price changes were introduced and explained to the public. A number of interesting conclusions can be drawn from this short text.

- (1) The overall goal of the leadership in North Korea is certainly to stay in power, to stabilize its position and to actively pursue its goals:

These measures, effective July 1, are intended to comprehensively improve the people's living standard based on the new economic policy mapped out by General Secretary Kim Jong Il to build an economically powerful nation (PEOPLE'S KOREA 2002).

- (2) The reformers claim not to reform anything at all, but just to improve the existing system and to (re)enforce longstanding principles:

The more one produces profits and the harder he works, the larger share he takes. On the contrary, if one does not work hard and produces less profits than required, he receives a less wage. This is the socialist principle of distribution (*ibid.*).

- (3) Transparency, a basic demand of international organizations like the OECD, is emphasized in connection with the reforms:

A government official of the State's price control bureau says: "If we are to pursue a policy of seeking more real profits, each worker must know the real situation of his own economic activity." He means that the present economic situation requires cutting much of state subsidies and applying a market price system to all sectors (*ibid.*).

¹⁰ To be sure, there is more to capitalism than just capital; a certain level of technology, the availability of labor, and freedom of entrepreneurial activity are other ingredients.

¹¹ Art. 24: Private property is confirmed to property meeting the simple and individual aims of the citizen.

- (4) As a matter of fact, the guiding ideological foundations of the society are not to be touched; the reforms are backed by the highest authority, who, by doing so, risks being personally connected to a failure:

The recent series of economic measures came in line with General Secretary Kim Jong Il's new economic policy, whose essence is that the basic method of socialist economic management is to gain maximum profits while adhering to socialist principles (ibid.).

- (5) To secure stability, any sudden or desperate measures need to be avoided, instead showing the people that everything is being carried out gradually, according to a well thought and long-term plan:

According to an official at the State Planning Commission, it was in the year 2000 that this new economic policy of Kim Jong Il began to be put into practice in earnest on a national scale. It contained the strengthening of the cabinet's role as the headquarters of the national economy; the transfer of authority of economic planning to each leading economic organ at all levels; the rational reorganization of factories and enterprises and the improvement of their management; and the differentiation and specialization of production (ibid.).

- (6) The term "competition" itself is not new to socialist economies. However, it was used in connection with "socialist" (--> socialist competition) and was meant to be a friendly exercise and an ideological incentive for productivity increase. Now, the losers in the competition have to face serious consequences:

...those factories and enterprises that had failed to produce profits owing to their outdated technology or obsolete production processes, were closed down... From July 1 on, factories and enterprises are to be given objective assessments of their profits, and to encounter stiff competition that has never faced before (ibid.).

- (7) If the official announcements can be trusted, costs - and consequently, prices - will really matter in North Korea:

A cost accounting system in economic management will be applied more thoroughly to enterprises, while individual workers will be required to work harder to produce more benefits (ibid.).

- (8) Aside from the general goal of increasing the productivity, two specific areas are mentioned: Agriculture and international economic relations, namely inward FDI:

There is no doubt that strict adherence to the socialist principle that profits should be distributed according to one's ability, will be an incentive for people to create profits. Meanwhile, the raise in government's purchase price of rice is expected to stimulate farmers' enthusiasm for agricultural production... A successful implementation of the government's new economic policy will also contribute to strengthening the Korean won and creating favorable conditions for foreign investments in the country.

Up to July 1st, 2002, the official prices in North Korea strongly reflected a state owned, ideology-based national economy, where market mechanisms of any kind simply did not matter. For external observers, it was - and still is, but this might change - generally unclear what the production costs per unit of output are, and we usually had no idea of the degree of subsidization. The collection of data, if at all, was possible only on the micro level and in a sporadic way. To make matters worse, other than in many former socialist countries in Eastern Europe etc., even basic goods like food were not available to the consumers in an amount that would guarantee a market saturation. In other words, having the necessary sum of money was not sufficient to buy the desired quantity of a specific good. This became most evident in the case of rice, which was rationed, but was also true for other products. Money was not able to fulfill some of its basic functions.

After the first visible sign of economic reform, the more outward-oriented Joint Venture Law of 1984, a serious change on the domestic scene occurred in the early 1990s. It led to a dual price structure for many goods, just as described from a theoretical point in part 1 of this article.

	old	new	nominal change factor (times)
rice (kg)	0.08 Won	44 Won	550.00
corn (kg)	0.49 Won	20 Won	40.82
electricity (kWh)	0.035 Won	1.8 Won	51.43
bus fare ¹²	0.10 Won	2.0 Won	20.00
basic wages	110 Won	2,000 Won	18.18
special wages		6,000 Won	54.55
rice procurement	0.8 Won	40 Won	50.00
1 US\$ ¹³	2.19 Won	150 Won	68.49

Table 1: Recent changes in North Korea's Price System¹⁴
(source: People's Korea at www.korea-np.co.jp, Aug. 17, 2002)

We must be aware of the fact that North Korea does not have a distribution problem, it has a production problem. Simply optimizing the distribution of too few goods might alleviate some of the citizen's heaviest burdens, but it will not solve the real difficulties. As shown in part 1, fully legalizing the private markets and allowing free trade with food and other goods would shoot the prices up to the sky until the output level exceeds the demand and creates a downward pressure on prices. The problem is that the demand for food (confined by the minimum quantity to survive) remains downward inelastic, and in addition there is a time lag for incentives to generate increased outputs. This means in reality that a probably quite large number of people will temporarily not be able to buy enough to eat under a market system. One could argue that the country was in this situation before; however, back then there was not much food available at all, so that people concentrated on the practical matters of survival. If they, on the other hand, had to starve in front of brimming shop windows and eating neighbors, the result would be a perfect revolutionary situation in the good old Leninist sense. The decision-makers in P'yŏngyang, who have certainly studied the history of the 1917 revolution and others, simply cannot afford this. Therefore, their decision to let the prices rise dramatically, but not uncontrolled, makes sense. This approach somewhat diminishes the additional incentives for producers to raise productivity or otherwise expand production, but it also reduces the political risk.

This needs to be kept in mind when attempting to provide a proper analysis of the recent price changes. The relevance and the expressiveness of the data is obviously very limited at best. However, the changes *have* occurred and are likely to have some effects, too, even though probably not the desired ones. The goal of this article is to come closer to an understanding of what the motives of the decision-makers in North Korea were, and not so much the currently almost unanswerable question of the short-term microeconomic effects of the reforms.

¹² Based on personal communication with A. Vorontsov of the Russian Academy of Sciences, Moscow, who visited P'yŏngyang in late November 2002, this is also true for the prices of subway tickets.

¹³ According to the Foreign Trade Bank of the DPRK, as of May 10, 2001, the buying rate was 2.15 and the selling rate was 2.236 (Nam 2001b).

¹⁴ The source for this study (People's Korea) was chosen due to its nature as a semi-official news organ of North Korea. An analysis by the Seoul-based Korea Development Institute (Cho 2002) lists varying information on the old and new prices.

Apart from more or less irrelevant absolute numbers, we need a tool to determine real price changes to assess the planned effects of the new prices on the North Korean economy. This is necessary since the incomes have been changed, too, and the rate of price change varies widely depending on the product in question. We would therefore have to weigh the nominal increase rate in the price of every single product by some yardstick. There are several possibilities, each with its pros and cons, some of which will be further explored here.

Case I: Nominal Wage Hikes and Real Prices

This is the most logical step. We simply compare the change rates in nominal incomes with the change rates in nominal prices.

To do so, we first determine the factor by which the price of a good 'a' has changed:

(1) new price of good a : old price of good a = nominal price change factor of good a

Then, we determine the factor by which the income has changed:

(2) new wage : old wage = wage (Won income) change factor

Finally, we weigh the change in the nominal price for good a by the change in the nominal income:

(3) price change factor of good a : income change factor in Won = real price change factor for good a

If the real price change factor is 1, there has been no real change in prices. If it is below 1, the goods have in fact become cheaper, and if it rises above 1, this indicates by how many times the real prices have been increased.

	rice	corn	electricity	bus	equation
new price (Won per unit)	44.0	20.0	1.8	2.0	
old price (Won per unit)	0.08	0.49	0.035	0.10	
price change factor	550.00	40.82	51.43	20.00	(1)
new wage (Won per unit)	2,000				
old wage (Won per unit)	110				
wage (Won income) change factor	18.18	18.18	18.18	18.18	(2)
real price change factor	30.25	2.25	2.83	1.10	(3)

Table 2: Price changes for case I and normal wages

We see a number of results: First, as already suggested by a comparison of the nominal change factors in table 1 with the change factor for the basic wages, the real prices have all increased. The purchasing power of the average wage earner in North Korea based on Won has been substantially reduced. To illustrate that: While under the old system, an ordinary wage earner could theoretically buy 1,375 kg - over one metric ton - of rice per month if he would be willing to spend all his income on that (and if he would have been able to do so), under the new system he could buy merely 45.5 kg of rice. This is extremely little if compared to international standards, but it reflects international market prices¹⁵ if we apply the new Won-Dollar exchange rate, which would produce

¹⁵ A 20 lbs bag of rice (about 9 kg) cost 3.99 US\$ in a supermarket in New York in December 2002, resulting in a price per kg of 0.44 US\$ (source: <http://my.ctownsupermarkets.com/cirpage.asp?p=2>). A metric ton (1,000 kg) of rice on the international cash market in Asia/Thailand cost 155 US\$ on average, resulting in a price per kg of about 0.15 US\$. In the European Cash Market, Thai rice on average cost 253 US\$ per 1,000 kg, leading to a kg price of 0.25 US\$. Finally, in the US Cash Market, rice (milled long grain) cost about 8.60 US\$ per 100 lbs, i.e. 45.3 kg, resulting in a price of 0.11 US\$ per kg (source: www.oryza.com/prices as of December 3rd, 2002).

a rice price of 0.29 US\$ per kg. Obviously, rice is not overpriced, but the incomes are extremely low - 13.30 US\$ per month for ordinary income earners based on the official exchange rate.

Second, this factual reduction in purchasing power has happened unevenly, with rice becoming more than 30 times more expensive than it has been before, while prices for corn and electricity increased only about two to three times. This supports the hypothesis that a price differential between official and farmer's market prices had to be reduced or eliminated, and shows that the price distortion under the old system is perceived by North Korean planners as having been especially high in the case of rice.

Third, it can be argued that the planners changed the price relation between the goods intentionally - giving support to the notion that the decisions of North Korean policy makers are based on rationality¹⁶. The real price for a bus ride has been kept nearly stable for ordinary income earners, implying that either the costs were already reflected by the price or that for political reasons the price had to be kept stable. The latter does not seem to be too plausible, considering the increased prices for food, which tends to be a much more politically sensitive good than mass transportation. However, it is also possible that some goods or categories of goods like food, electricity etc. were what the reformers aimed at, while ignoring others like bus rides and therefore just increasing them proportionally along the wage hikes.

For the earners of special incomes, a remarkable observation can be made.

	rice	corn	electricity	bus	equation
new price (Won per unit)	44.0	20.0	1.8	2.0	
old price (Won per unit)	0.08	0.49	0.035	0.10	
price change factor	550.00	40.82	51.43	20.00	(1)
new wage (Won per unit)	6,000				
old wage (Won per unit)	110				
wage (Won income) change factor	54.55	54.55	54.55	54.55	(2)
real price change factor	10.08	0.75	0.94	0.37	(3)

Table 3: Price changes for case I and special wages

We see from table 3 that for them, the price of rice has increased, too, although much less dramatically than for the ordinary wage earners. However, we also find a real price *decrease* for the other goods, with the price of electricity having remained relatively stable and the price of corn having been reduced by 25%. A bus ride costs now only 1/3 of the old price. This is a strong argument to support the claim as quoted before - that harder work is to be rewarded by higher benefits, the latter not just being of ideological nature, like finding the own name being praised on a wallpaper, but in increased purchasing power for important goods.

Furthermore, the real price decrease for the earners of special wages is a strong indicator for a deliberately favorable treatment of particular groups within the society; we will come back to this point and its implications later (see case III). What we can also derive from both cases, ordinary and special incomes, is an increased relative value of rice if compared to all other goods; this is a powerful incentive for rice producers to expand their rice output. Of course, one might argue that as long as the price set by the state is still below the market price, that would not change anything. This is, however, not true; selling at the market involves transaction costs, including a certain risk; who knows, maybe next month these markets will be banned and all traders persecuted - it would not be the first time that reforms have been taken back. Only a sufficiently high profit will make

¹⁶ Even though, as Park (1996) suggests, this rationality might differ from "Western" standards.

up for that danger. So, by increasing the return a producer gets from selling to the state, the price gap between state and free market gets narrower, which reduces the profit and hence the payoff for taking a risk - or, in other words, it reduces the opportunity costs of selling to the state. As a result, less producers will sell on the private market, strengthening state procurement, while not ending trade at the markets completely. It remains to be seen in how far this motivation is dampened by increased production and transaction costs, like for electricity (irrigation), fertilizer and transportation.

Case II: The Rice Equivalent

To illustrate the enormous increase in the relative value of rice, we now calculate the price of the other goods expressed in units of rice instead of Won and then look at the changes from this perspective. We need to be aware that this approach still depends on the Won denominated raw data; the result can only be a picture of the same (deformed) object, even though from a different angle.

First, we determine how the price relation between any given good and the "currency" rice was under the old system:

$$(4) \text{ old price of good a : old rice price} = \text{old price of good a (in kg of rice per unit)}$$

...and under the new system:

$$(5) \text{ new price of good a : new rice price} = \text{new price of good a (in kg of rice per unit)}$$

We can then compare the results of equations 8 and 9 for the single goods with each other.

$$(6) \text{ new price of good a in rice : old price of good a in rice} = \text{price change factor of good a}$$

	corn	electricity	bus	equation
old price (Won per unit)	0.49	0.035	0.10	
old rice price (Won per kg)	0.08	0.08	0.08	
old price (kg rice per unit)	6.12	0.44	1.25	(4)
new price (Won per unit)	20.00	1.80	2.00	
new rice price (Won per kg)	44.00	44.00	44.00	
new price (kg rice per unit)	0.45	0.04	0.04	(5)
price change factor	0.07	0.09	0.03	(6)

Table 4: Price changes for case II

These results, as expected, reflect the increased relative value of rice. It has become more scarce and thereby a more powerful currency. If seen from this perspective (if a consumer exchanges his whole income into rice and then trades rice for other goods), prices for the other goods have been substantially reduced, to 7, 9 and 3% of their old theoretical rice equivalent, respectively. If we assume that rice is more likely to be a currency than Won, it substantially increases incentives for rice producers to deliver a higher output.

Those who have hoarded rice would now face enormous profits if they sold their rice off. The limit to this perspective is that it does not make much sense at all for a rice hoarder to purchase large quantities of bus rides or electricity in exchange, since both can be consumed only to a very small extent and can not be stored. It would - not only in this context - be interesting to know, which spending alternatives beyond the few goods mentioned in table 1 exist and how much trust North Koreans have in their own currency. In addition, if a further increase in the relative rice price would be anticipated - which would be a rational assumption since international support and hence the supply have been reduced - the rational hoarder would rather wait than sell. The poten-

tial treatment of rice as a currency belongs to the many fields in which we lack the necessary data to make a sufficiently safe assertion.

Case III: The Exchange Rate

This approach is in many ways similar to case II: We use the price for another currency as the yardstick to get an idea of the real changes in the North Korean price system. This time, it is not rice, but a monetary currency: the US Dollar¹⁷. As can be seen from table 1, the exchange rate of the North Korean Won vs. the Dollar has also been adjusted, which makes it applicable for this analysis. A short glance at table 1 shows that except for rice, the prices for all other goods have increased to a lesser extent than the price to pay for another good called 1 US\$ (the exchange rate). The US\$ is, after rice, the good with the highest price increase rate. This would lead to the intuitive expectation that all other goods have become cheaper if expressed in US\$. We now will make this fact more transparent and make a comparison among the different products easier.

To do so, we first determine the old prices of the goods in US\$ under the old exchange rate:

$$(7) \text{ old price of good a : old Won-Dollar exchange rate} = \text{old price of good a in US\$}$$

... and the new prices of the goods in US\$ under the new exchange rate:

$$(8) \text{ new price of good a : new Won-Dollar exchange rate} = \text{new price of good a in US\$}$$

Finally, we calculate the price change of the goods in US\$:

$$(9) \text{ new price of good a in US\$: old price of good a in US\$} = \text{price change rate of good a in US\$}$$

	rice	corn	electricity	bus	equation
old price (Won per unit)	0.08	0.49	0.035	0.10	
old exchange rate (Won per US\$)	2	2	2	2	
old price (US\$ per unit)	0.04	0.25	0.018	0.05	(7)
new price (Won per unit)	44	20	1.8	2.0	
new exchange rate (Won per US\$)	150	150	150	150	
new price in US\$ (US\$ per unit)	0.29	0.13	0.012	0.013	(8)
price change rate	7.33	0.53	0.67	0.26	(9)

Table 5: Price changes for case III

And indeed, with the exception of rice where we notice a 733% increase - another hint at the highly unrealistic old price - the prices in US\$ have fallen significantly (price change rate <1). Might the real prices have been reduced instead of having been raised? This is just an irrelevant theoretical option for most North Koreans, but certainly true for the owners of US\$. From table 5, we can therefore derive the intention of the reformers to benefit those, who have access to hard currency - in short, the elite. Was part of the reforms designed to fill the pockets of the upper 10,000?

In case the redistributive effects of the price reform in favor of the elite were indeed desired, this vindicates two hypotheses. (1) The elite was either able to pursue its group interest and "capture" the decisions of the top policymaker(s), or (2) the leaders felt the need to pacify the elite by offering it material gains. The implications of both options are dramatic. Either, the government was coerced to react to the demands of societal groups, meaning a broadening of the political

¹⁷ The DPRK has announced in late 2002 that it would now conduct all external economic activities based on the Euro. But since the Euro can be freely converted into US Dollars, this analysis is not affected.

power base and hinting on a more heterogeneous power structure¹⁸. Or, actual or anticipated resistance within the ruling elite had to be countered - by other means than the use of force, which is not to be taken for granted given North Korea's history. Probably, the reforms were the result of a mix of these factors. All three scenarios imply a weakening top leadership and more diversity in hitherto monolithic domestic politics. This is a dramatic observation, since so far there are no signs of any organized political opposition in North Korea.

Fiscal Policy and the Budget

In the attempt to analyze the intended and real effects of the July 2002 changes, we have so far mostly concentrated on the consumers, mainly due to the available raw data. However, there are a few numbers that allow us to draw some direct assumptions for producers and conclusions for fiscal policy.

Under the old system, the state has purchased rice at a lower price than the retail price, effectively subsidizing rice production. With all the reservations against data from North Korea in mind, these subsidies can be quantified. Let us assume that each of the roughly 23 million citizens is given the chance to purchase a daily ration of 500g rice for each of the 365 days of the year from state-run distribution agencies. That results in a yearly amount of state-subsidized rice of about 4.2 million metric tons. If the state procured rice for 0.80 Won per kg and sold it for 0.08 Won, it subsidized each kg with at least 0.72 Won, leading to yearly subsidies for rice alone of about 3 billion Won¹⁹. This enormous sum is equal to about 13.84% of the 21.68 billion Won²⁰ state budget of North Korea for 2001 (MOU 2002). Ironically, an increased production of rice and higher rations for the citizens meant a higher fiscal burden for the state!

Now, from July 1st, 2002, the state changes the prices so that the purchasing price (40 Won per kg) is 4 Won lower than the retail price (44 Won per kg). That certainly means a substantial fiscal gain by getting rid of the subsidy overnight. If the transaction costs per kg are below 4 Won, the state now makes a profit. I would, however, suggest that the goal of the state was not creating a revenue from rice trading, but rather to dispose of the heavy subsidy. Concerning the signals this sends out, one might argue that the fiscal disincentive (increased production results in rising total amount of subsidies) *before* the reforms was of little relevance; however, provided that the reforms are part of a plan to bring some basic economic principles back to life, the elimination of this disincentive *after* the reforms is certainly of enormous importance.

This adds another piece to the puzzle. Only if the state seriously considers to let money matter in the national economy, he would care about sound fiscal policies which usually means cutting spending and increasing revenues to secure a balanced budget. This is exactly what happens here. Although some of the other calculations made before are admittedly somewhat complicated, the fiscal effect is obvious and can rightfully be assumed as having been intended.

North Korea officially dealt with the budget issue in the 7th session of the 9th SPA (Supreme People's Assembly or ch'oego inmin hoe'ui, the Parliament) in April 1994, but stopped convening SPA meetings for several years after the death of Kim Il-sung in July 1994. The first session of the 10th SPA was convened in September 1998, and at its second session in April 1999, it dealt with the budget issue again and disclosed a concrete budget size ever since until 2002. The 2003 budget

¹⁸ A staunch optimist might even think of the fragile roots of a civil society in North Korea.

¹⁹ Transaction costs are excluded but would change the result insignificantly, further increasing the subsidies.

²⁰ The available budget data for 2002 (22.17 billion Won) are not used since the price changes - including a substantial inflation - were applied in the middle of the fiscal year.

was announced by Finance Minister Mun Il-bong on March 26 (for a full transcript see RODONG SINMUN 2003a). No absolute number for the new budget size was disclosed this time, hinting at some serious problems with assessing the effects of the 2002 price reforms.

A brief comparison with recent budgets in North Korea shows that the only truly remarkable and outstanding features of the 2003 budget are the increase rates in expected revenue and expenditure (+13.6% and +14.4%, respectively). The comparable numbers hovered around 2.3 to 3.2% in the three preceding years of 2000-2002. Defense spending increased only slightly, showing a stable trend, from 14.3% of total in 2000 to 15.4% in 2003. As usual, we must add a disclaimer here: For a state so obsessed with secrecy as the one in North Korea, it is extremely hard to believe that any of these numbers is even approximately correct. But apart from absolute numbers, changes matter - and the question remains, why the country expects such a great increase in revenues.

Since we have no evidence on the official assessment of food subsidies for the previous years - in fact, we do not know whether these have been included in the budget at all - it is at least a viable theoretical option that the increased spending is financed by the savings from scrapping the subsidies for rice. The two numbers - 13.84% savings and 14.4% spending increase - look suspiciously similar.

Life-Line or Part of a Concept? People's Life Bonds

In his report before the SPA on March 26th, 2003, Mun Il-bong also mentioned the plan of the government to issue so-called People's Life Bonds (inmin saenghwal kongch'ae). They will come in three denominations (500, 1000 and 5000 Won) and will be valid for ten years from May 1st, 2003 to the end of April, 2013. Revenue is to be created through ordinary interest (to be redeemed by the annual state budget from December 2008 until the expiration date) and through a lottery, which is planned to be held once every six months in the first two years and once a year thereafter. There is also an indication of an extra reward, both in political and material terms, for those who buy large quantities of these bonds (KCNA 2003).

Since dealing with North Korea in lieu of reliable information often requires a largely analytical component - in other words, guessing - we should do so and ask, what the People's Life Bonds are really necessary for. We have seen that by scrapping the substantial subsidies for rice, the state has saved considerably, which would make up for the claimed increase in budget expenditure in 2003. Since no absolute numbers on the 2003 budget have been published, we can not exclude the option that instead of booking the savings as decreased spending, for political reasons²¹ they were rather treated as increased revenues. So, why the dramatic measure of issuing the bonds, for the first time since the Korean War? Was it to reduce the debt of the state at the *state owned* banks? Or to convert the *nonconvertible* North Korean Won into foreign exchange on international financial markets? Certainly not. The only place where one could probably use North Korean Won is North Korea itself. So, if the budget is balanced - where is an undersupply of domestic money? One possible answer is suggested by anecdotal reports (POMFRET 2002) that single enterprises are not able to pay the nominally increased salaries. It can not be excluded that the one time (!) extra revenue created by issuing the bonds will be used to pay the wages until the new price system functions, i.e. until the factories start selling their products at the new prices and thereby create higher reve-

²¹ Let us not forget that this is North Korea, where there is - so far - no private sector. If the state cuts the budget, this will not be regarded as a tight and most likely responsible fiscal policy (positive image), but as a sign that the GDP has decreased and hence the amount of money to spend (negative image).

nue to cover its production costs, including wages. The same might be true not only for labor, but also for the purchase of other production factors, i.e. for domestic business-to-business (B2B) transactions, which are to be conducted on the basis of "costs, prices and actual profits" according to article 33 of the 1998 constitution.

In all institutions and enterprises a system of calculation based on money will have to be correctly installed, production and financial accounting system be strengthened, production and management activities be carried out thoroughly by calculating the actual profits. (RODONG SINMUN 2003a)

If the above is true, it means that the issuance of the People's Life Bonds is a sign of a desperate effort to prevent a failure of the reforms, but also another indicator of the strong determination of the North Korean leadership to stabilize their national economy after the 2002 price adjustments, with the goal of creating a domestically functioning and internationally compatible national economy in the future. The DPRK Central Bank could simply print money. The only reason not to do so is that the reforms are for real and North Korea has decided to explore risky new ways to create revenue, rather than letting the reforms be weakened.

No absolute numbers for the 2003 budget have been released. This might be a tactical move, but it could also be a direct result of having a price reform with dynamic after-effects in the middle of the fiscal year. Unless the planners in North Korea have gathered and analyzed an enormous pool of micro-data, it could very well be that they simply *assumed* a more or less stable budget if compared to last year, hoping for increased spending based on the saved rice subsidies, and keeping their fingers crossed that sooner or later, after the dust has settled, they will be able to gather the needed data and compile a solid budget again. For us, that means waiting until March 2004.

Inflation

Without requiring too much calculation we can discern from the raw data (table 1) that the price changes, which are all nominal increases, have the function of a one-time inflation and substantially devalue the savings of North Koreans if these have been done in Won. We have to notice that no currency reform to balance this effect has happened. Therefore, holders of Won lost between 95% and 99.82% of their savings²². Intended or not, this deals a heavy blow to those who were able to amass considerable amounts of the North Korean currency and/or were expecting to be able to make use of it. This may concern traders on farmer's and unofficial markets²³. It would be most interesting to know whether certain members of the elite have been noticed of the price changes in advance and had the chance to convert their Won savings into other currencies. The absence of an accompanying currency reform is a strong argument for supporting the hypothesis that not only had distortions in the price system to be eliminated, but that also an expropriation was to be realized. Again, little can be said about how targeted this expropriation measure has been.

From an economic perspective, we witnessed an inflation that was introduced by the state, not as the result of a large number of independent actions of various market participants. The market, if it really exists, still has to react. Prices on the market will soar until they reflect the new old balance of demand and supply. This is true for rice, and it is true for the Won-US\$ exchange rate. The Won has been effectively devalued, both regarding its purchasing power of rice and the US\$ exchange rate. In order to restore the old relations - provided, they reflected a demand-supply equi-

²² If they had planned to spend them on the good with the lowest price increase rate, a bus ticket, or with highest rate, rice, respectively.

²³ Noland (2002) argues that in the future, further adjustments will be needed (continuous vs. one-time inflation) and that traders are usually less affected since they escape into alternative currencies.

librium - the nominal market price has to rise. The question is not if, but how far it will climb. At what point will the equilibrium be reached? Will it be the same as before, or did the reform contribute to a reduction of the disproportions? Will the state let all that happen? How will he react?

Recent reports (POMFRET 2003) indicate that indeed, market prices are on the rise. The price for rice did reportedly go up by 50% over the last quarter of 2002. This is surprisingly little if compared to the 55,000% nominal and 1,008 - 3,025% real price increase rates (see tables 1, 2 and 3). If no dramatic changes follow in the next months, the state will indeed have achieved a substantial narrowing of the gap between official and unofficial market prices. The target of this are the producers: They are more likely to sell to the state now rather than on the market. We must not forget that doing the latter involves a lot of transaction costs, including bribes, and a high risk. As long as the chances for profit are big enough, people will still sell on unofficial markets; if these profits decrease, the relevance of the risk and the transaction costs will rise, forcing more and more of the producers back under the umbrella of state-controlled trading and distribution. From this perspective, the price changes were an - obviously successful - attempt to regain control.

There is a way to calculate the inflation rate in the DPRK. Unfortunately, we cannot use it yet. The idea is simple: Since we have no chance to create a standard basket of goods and services and watch the development of the sum of the weighted prices over time - before and after July 1st, 2002 - we would simply rely on the budget. Setting the 2002 budget at 100%, we would compare it to the 2003 budget; the percentual increase would be a good estimate (of P'yŏngyang's estimate) of the one-time inflation caused by the price increases. Unfortunately, the Minister of Finance did not do us the favor of disclosing absolute numbers for the budget this year (see above). As indicated before, this would in fact be almost impossible, since the nominal and relative prices have been changed right in the middle of the fiscal year, and the markets are still in the reaction phase.

Part 3: Bringing Ideology in Line with the Reforms

Since North Korea is a country in which the official ideology plays such a predominant role, it is an interesting question how the changes in economic policy and the subsequent social and political ramifications will be accompanied by official explanations. There has in fact been a very bold initiative to create and disseminate various concepts to ideologically back up the described changes. A brief summary of these approaches will be presented later in this chapter.

The "Three Represents" Korean Style?

I disagree with the idea that the PR China will be a model for economic reform in North Korea; South Korea in the 1960's is much better suited to this role²⁴. However, for political reform, China with its Three Represents²⁵ might very well serve as an example for handling the issue technically, i.e. providing a solution on how to integrate non-workers, non-farmer's and non-engineers into the allegedly class- and frictionless society of socialism. A truly remarkable, but easily overlooked

²⁴ This is not the topic of this article; however, cultural, demographic and geographical factors, the existence of a centralized, authoritarian state, a strong military component in politics, a very fertile soil for neomercantilism, the importance of manufacturing and the existence of large enterprises are strong arguments.

²⁵ In brief, this means that the Communist Party of China does not only represent workers, farmer's and progressive intellectuals, but also the newly emerged entrepreneurs, thereby attempting to bring them and their businesses back under the umbrella of the state and the party, while eliminating contradictions between reality and ideological theory that emerged through the reforms started in 1979 under Deng Xiaoping.

passage of DPRK Finance Minister Mun Il-bong's speech at the SPA session of March 26th 2003 reminds very closely of this Chinese concept:

"Our people, holding high the Great Leader's ideology of nation-building (kǒnguksasang) after liberation, have built a new democratic Korea upon the rubbles, *those with strength* (him) *using strength*, *those with knowledge* (chisik) *using knowledge*, and *those with money* (ton) *using money*." (emphasis and translation mine; RODONG SINMUN 2003a)

"Strength" stands for the workers and farmer's, "knowledge" stands for the intellectuals - all three well known and represented in the emblem right on the Chuch'e-Tower in P'yŏngyang (hammer, sickle, brush). But "money" is a new component, it stands for those who excel in economic activities, which is of course only acceptable if it serves the right purpose. Nevertheless, even though not even yet visible, successful entrepreneurs are already in the process of being integrated into the social caucus. It is remarkable that the leveling of the ideological battlefield starts so early, i.e. preparing the integration of a group that does not even exist yet - or we have so far underestimated the scope and the impact of the economic reforms in North Korea.

"Gigantic Change" and the New Requirements of a New Era

An indigenous form of ideological support comes from the principle that old concepts worked under old conditions and new conditions require new concepts. An increasing number of North Korean publications contain slogans that sound like heresy at the first glance:

"Functionaries for economic guidance shall free themselves from the old viewpoints of the past era (chinan sigiüi nalgün kwanjomesö)..." (RODONG SINMUN 2003a).

Kim Jong-il himself formulated it even more bluntly in January 2001:

"Things are not what they used to be in the 1960s. So no one should follow the way people used to do things in the past...We should make constant efforts to renew the landscape to replace the one which was formed in the past, to meet the requirements of a new era (saeroun sidaeüi yogue makke)." (KIM 2001)

How much more explicitness can we expect from the top man in P'yŏngyang? "Past" (chi'nan nal) is defined as a period during the existence of the DPRK, not before. Saying "replace" (Kü myŏnmorül ilsinsik'ida) is as close as one can get to demanding reform. The very title of Kim Jong-il's article contains the words "gigantic change" (köch'anghan chŏnbyŏn). North Korean officials go even further in interpreting their leader's words. Ch'oe Hong-kyu, bureau director in the State Planning Commission, is quoted as saying:

"Kim Jong-il stresses that all the outworn and dogmatic 'Soviet-type' patterns and customs should be renounced in the fields of economic planning, financing and labor management... He also points to the fact that foreign trade should be conducted in accordance with the mechanism and principles of capitalism." (PEOPLE'S KOREA 2002b)

This reveals something unexpected: A good amount of flexibility on the North Korean side. Which is, by the way, in line with the official opinion. The ideological backing for change is provided by the Chuch'e Ideology itself, in particular its creative principle. The latter was originally meant to provide some independence from Moscow and Beijing; now, it has the potential to serve both as a justification of reforms AND as a bridge to the past.

The creative stand is one of the cornerstones of the DPRK's Chuch'e ideology, and is mentioned frequently in various publications of the last decades.

The attitude of a master towards the revolution and construction also finds its expression in the creative stand. The creative stand is the revolutionary stand of opposing dogmatism and applying the universal principle of Marxism-Leninism and the experience of other countries to *suit the historical conditions*

and national peculiarities of one's own country. In order to maintain the creative stand in the building of an independent national economy, our Party held fast to the revolutionary principle of the working class, studied the actual conditions of our country and had anything suitable to them accepted boldly *without being restrained by any accepted formulas and propositions. As for the experiences of other countries we adopted useful ones, not unnecessary and harmful ones.* And in cases of adopting good ones, too, we improved and reshaped them to *suit our realities.* (emphasis mine; ECONOMIC RESEARCH INSTITUTE 1977: 31)

Embracing the Market: The Correct Understanding of a Socialist Economy

Another trend in North Korean attempts to explain the changes is provided by the highest possible authority, Kim Il-sung himself, who is quoted as saying:

Originally, it was not in a socialist system nor in a capitalist system that the term market first began to be used; the term was used in feudalist societies. (Kim Il-sung Works, Volume 23, p. 466, quoted in: YI 2002)

There is a number of other interesting thoughts in Yi's article. He accentuates the provisional character of a socialist society - as the transitional stage towards communism - and points at the fact that due to this transitional character, there is a relationship between commodities and money which requires markets. He confirms the dual, hybrid structure of the economy as indicated in the first part of this article:

In the socialist society, the domestic market is divided into two markets: the market, which is established based on the socialist economic forms, and the farmers market. (YI 2002)

The course of development according to Yi points into the direction of (re)gaining control by the state, once an output of x_E (see chart 1) is reached:

The farmers market... is a supplementary form that transitionally exists until such time when all consumer goods are sufficiently produced and supplied by the state and when cooperative ownership is turned into an all-people ownership. (YI 2002)

Pointing at the fact that experiments of other "revisionist" countries with a socialist market economy have ended in failure, he concludes that "Our party was the first that completely resolved the issue of the socialist market not only theoretically but also in practice." (ibid.). He explains that since most of the transactions in the DPRK are happening between state-owned enterprises, this leaves the state the opportunity to perform its economic guidance function, including systematic distribution, thereby guaranteeing state control of the economy.

"In a market where the production means are circulated through the material supply work [state distribution], the law of a systematic and balanced development of the people's economy and the law of production and other socialist economic laws function, and the law of value [demand and supply], which is the law of production and commodities circulation, also functions as a backup, though it is limited to an extent."²⁶ (YI 2002)

He goes on to emphasize that the portion of transactions still controlled by the state is very large and can not be regarded as a market. The reason is that while management and utilization rights of the concerned commodities are indeed transferred, the ownership remains untouched, since both parties of the transaction are actually state owned.

Obviously, the same dual or hybrid system as described for business-to-customer (B2C) relations in the case of agricultural goods exists in business-to-business (B2B) relations, with the so-called "material trading markets" being the market component supplementing the state's role. The

²⁶ comments in parentheses mine, RF

enterprises are allowed to produce more of a certain good that the plan dictates, and then to offer it to other enterprises in exchange for goods that those have in excess.

"Organizing a material trading market for plants and enterprises enables those plants and enterprises, which are related to one another, to fill each other with the *surplus materials* produced with many reasons in the course of production and operation activities and with the materials that plants and enterprises *can freely dispose of* according to the state's rule, which allows the free disposal of some product portions in order to promote the enterprises' comparative individuality and creativity. This makes it possible to mobilize internal reserves that are not anticipated in the course of drawing up a national plan and, thereby, helps enterprises *self-reliantly and swiftly* resolve problems that arise in their production and operation activities, thus *stabilizing production* and contributing to implementing the national plan." (YI 2002; emphasis mine)

Again, the idea is to stabilize the state controlled system and to supplement it, not to replace it. This answers the questions on how the leaders in P'yŏngyang plan to proceed after an output level of 100% or x_E (market saturation) is reached (see Chart 1): they seem to think they can close the market again. It is certainly debatable, once this stage has been reached, that those who benefit from the free market portion of the hybrid system (including those who benefit via corruption) will be ready to give it up; it can further be doubted that the production level will be sustained once the incentives from the market segment are gone; finally, the market structures and numerous transactional relationships will have changed the society to an extent that will make it extremely difficult to go back to a purely state-controlled national economy.

Letting the People Know: The New Year's Joint Editorials

To supplement this theoretical debate, let us have a short glance at the most programmatic propagandistic publication in the DPRK, the New Year's Joint Editorial of Rodong Sinmun, Chosŏn Inmingun and Ch'ŏngnyŏnjŏnwi. These editorials usually both set the stage for the following year and acknowledge developments of the preceding year. The analysis requires some reading between the lines and is therefore highly subjective; nevertheless, this is what the North Koreans read and actually study over and over again, so the significance and expressiveness of these articles should not be underestimated.

In 1998, the Joint Editorial used old phrases like "The socialist fortress of Korean style should be built up in the economy." In 1999, the editorial for the first time, but only briefly mentions "actual profit" (silli) in economic activities, in addition to a "new state structural system". In the editorial of 2000, in addition to propagating a "Second Ch'ŏllima advance", i.e. the continuation of attempts to increase productivity through intensified use of human resources, we find a passage that cautions: "We should strongly wage battle to check the spread of imperialist's idea and culture to our country." The 2001 editorial characterizes the 20th century as "a century of Ch'ŏllima", specifically mentioning that the latter started in the 1950s. This at first sounds like an appreciation but if contrasted to the above quoted formulations about remnants of the past that have to be overcome, it could also mean that now an end to the policy of increased labor input has come. The editorial of 2001 finally contains the major elements of the new policy in a very clear way - we must not forget, that publicizing a policy via the Rodong Sinmun usually stands at the very end of a formulation process and marks the beginning of the implementation phase.

It is a priority task before us to introduce basic innovations in improving our ideas, thought, working style and fighting spirit. The 21st century is a time of great change and creation. Great leader Kim Jong-il leads us and carries out reform in a big way, looking ahead at the distant future. Our revolutionary soldiers should get rid of the old idea and leap forward as Kim Jong-il does. The new century requires

a revolutionary plan, unique idea and novel conception and an enterprising working style... Economic management systems should be reformed in a way suitable for the new circumstances and atmosphere.

In the 2002 editorial, for the first time we find the formulation "carrying out ... instructions ... with high results, not in words". Further, the "changing situation" is mentioned, along with the caution that the people should ensure "the highest profitability while adhering to socialist principles". Finally, in January 2003, the Joint Editorial contains the following passages:

We should also heighten the revolutionary vigilance against the imperialist's ideological and cultural poisoning and firmly preserve our ideology, morality and our noble socialist way of life... It is necessary to bring about a fresh change in the economic and cultural construction. It is fixed will of our party to radically change the appearance of the country and enable the people to live as happily as others in a few years to come... We should manage and operate the economy in such a way as to ensure the largest profits (kajang k'ün sillirül) while firmly adhering to our socialist principles.

The latter formulation possesses a key character and was repeated many times, for example in the report on the 2003 state budget (RODONG SINMUN 2003a).

So, from the analyzed documents, we find that indeed, there is a rich fund of research, news paper reports and propaganda in the DPRK that both emphasize (1) certain market reforms plus (2) attempts to provide a way to embrace these new developments and their results by the ruling ideology. If we regard the actual changes as described in the preceding chapters together with these proclamations, we arrive at a coherent system of planned, managed and fine-tuned reform instead of a wild ad-hoc trial-and-error acting on instinct or from short-term necessity.

To wrap it up, if we analyze how the DPRK tries to bolster the market reforms ideologically, there appear to be five basic approaches:

- (1) The changes are not changes, they are adaptations of the creative principle as part of the Chuch'e Ideology.
- (2) The changes might occur, but they are signs of developing the right form of a socialist economy, not turning to a capitalist model.
- (3) Markets themselves are not something related to capitalism in the first place, since they have existed long before and are kind of natural; emphasizing markets therefore does not mean emphasizing capitalism.
- (4) Markets exist only temporarily until their functions will be gradually taken over by the state.
- (5) Markets play a supplementary role to increase the efficiency of state-directed production and distribution, not to replace them.

North Korean ideological approaches to deal with markets

Conclusion

After considering the DPRK's options to introduce a market from a theoretical point of view, analyzing the 2002 price reforms, and taking a closer look at the theoretical and ideological debate in North Korea, it has become very clear that the reforms are meant seriously, and that they are for real. The two remaining questions are: Why were these changes initiated? And what should be the reaction of the international community?

So North Korea DOES Reform: But Why?

If my analysis so far is indeed correct, what triggered this obvious change in the basic approach towards the economy? I would like to offer two possible explanations. First, there is a new leader

in place since 1994. Kim Jong-il might be no Mikhail Gorbachev, nor a Deng Xiaoping, but the evidence makes it hard to believe he is a stubborn opponent of reform. On the contrary, his name is closely connected to it (see KIM 2001).

Second, and most importantly, we have to regard the current reforms as a reaction to the fundamental changes in the world order starting with the demonstrations of Solidarnosz under Lech Walesa in Poland 1981, propelled by the successive deaths of not less than three Secretary Generals of the Communist Party of the Soviet Union (Breshnev, Andropov, Tshernenko) that made the emergence of Mikhail Gorbachev in 1986 possible, and finally his ideas of Glasnost and Perestroika, both of which led to the sudden implosion of the Eastern Block in the late 1980s and the early 1990s.

This was a real challenge to P'yöngyang. First, it must have taken quite some time to find out what really happened. Later, leaders might have started thinking about lessons and practical implications, one of which might have been the 1993/94 enrichment program - but then, another major shock hit the society when its founder and central figure Kim Il-sung passed away in mid 1994. In North Korea, too, first things come first. In the years after 1994, a solution to the multiple vacuums created by this death had to be found. In lieu of reliable information, we should be careful before speculating about internal fights for power etc.; however, even though his unofficial nomination as heir in the early 1970s and the official announcement in 1980 gave Kim Jong-il 20-30 years of a good head start, the transition of power will certainly not have been easy. He first had to secure his own power after the death of his father. Soon followed the acute famine years of 1996 and 1997, called the "arduous march" in North Korea, and first signs of a slow recovery in 1998 (the "forced march"). In 1999, both "marches" were officially over, which opened the way to a new policy approach - not to forget the fact that public support for any kind of change can be assumed to be especially high after a period of such severe hardship. According to a North Korean official, Kim Jong-il's "new economic strategy... started with the strengthening of the functions of the Cabinet" (PEOPLE'S KOREA 2002b), which refers to the political reform of late 1998. This certainly makes sense if we assume that prior to the final announcement in the Rodong Sinmun, for a "gigantic change" there must have been a discussion and formulation phase. In addition, the new constitution containing signs of a new economic approach was passed by the Supreme People's Assembly in late 1998.

The reform is backed up by an all-out diplomatic push to solicit international support. On February 9th, 2000, a new treaty on friendship and cooperation was signed between the DPRK and the Russian Federation, after the Russians had cancelled the old treaty of 1961 and completely cut off their economic relations with P'yöngyang prior to establishing diplomatic relations with Seoul²⁷. Other important events are the 2000 summit meeting between Kim Jong-il and Kim Dae-jung, the bold diplomatic initiative towards Europe which resulted in the establishment of diplomatic relations with 13 of the 15 EU members and Brussels, the Mt. Kūmgang tourism project, the establishment of the Kaesöng economic zone, the Sinūiju zone, the Transkorean railway project, the opening of another land route between North and South, the summit with PM Koizumi... This is only the tip of the iceberg. It is undeniable that something very big is going on in the DPRK. The goal is certainly not systemic or regime change, since the reforms come from above, where people naturally have a vested interest in keeping their privileged position; rather, the plan is to stabilize the society and to find a way to maintain power while changing the structure gradually. This in-

²⁷ A step which was harshly criticized among Korea experts in Russia as "premature and lopsided" (MEDVEDEV et. al. 2002: 6)

volves adopting measures to reform the economy, so that it functions domestically and becomes more compatible as a precondition for an extension of international economic relations²⁸.

How Shall We React?

North Korea now has a hybrid economy consisting of a large state sector and a small, but very vibrant and officially sanctioned private market. North Korean economists and the propaganda machine try very hard to incorporate these markets into their concept of socialism and cautiously borrow from China's example.

The problem with the reforms is that there is no capital available. However, this money is badly needed to build or repair basic infrastructure like transportation and communication, and to resolve the shortage of electric power, which cripples all efforts to increase production. Further, the reforms have created a serious gap between immediate costs and an expected cash-flow. The North Korean enterprises need cash *now* to pay the increased wages and to purchase raw materials and intermediate goods at the new prices, before *later* production can create revenue. Without loans, the whole system of new prices and wages will collapse. The reforms will have been a failure in manufacturing and services.

Even more important is agriculture. There are now strong incentives for food producers to increase their output. However, it will naturally take time before first results emerge. Without food deliveries to bridge this gap for the next two or three years, the reforms will fade away in this area as well.

North Korea is seriously determined to reform. The Central Bank does not print money, even though it easily could. Rather, the state is desperately attempting to raise some short-term cash by issuing bonds, as announced in late March 2003.

Attempts to receive this cash from Japan in exchange for resolving the abductee issue failed in September 2002. In one month later, the DPRK played its last card - the nuclear one - to extract the badly needed funds from the USA. Washington called the bluff, and the game might be over by mid 2003. But who has won? The remaining option for P'yŏngyang to save the reforms would be to sell WMD to anybody who is ready to pay. So we might lose in the end.

The resulting policy implications are very simple: (1) provide enough food to North Korea to secure a basic supply for everybody, until the new incentives for a production increase in agriculture start to create a larger output. This could take two or three years. Distribution should be organized in a way that it is equitable, to ensure that everybody survives and thereby social stability is maintained. (2) provide sufficient loans to North Korean commercial banks to finance the shortages in cash-flow of its state owned enterprises, to help them to put their operations and business transactions on a solid footing. (3) support any North Korean request for technical training in the fields of accounting, fiscal policy, international finance, and so forth, since the concepts in question are new and untested in North Korea so far. There already are very concrete instances of such programs and new, detailed training requests by the DPRK have been submitted to the EU and other members of the international community (see FRANK 2002).

Giving North Koreans a fair chance to change themselves would produce a much more sustainable result than a change induced from the outside. Showing the necessary patience and supporting such a development would be truly worthy of a superpower and might give the United States a good part of its lost international reputation back. Seen from a business perspective, in-

²⁸ EBERSTADT (1999: 110) characterizes the "nature of the North Korean trade regime itself" as one of the major restraints to trade expansion with countries like the USA.

stead of hoping that Western companies would make big money from rebuilding a country *after* a war, why not participating in reconstruction right away, *before* physical and political damage was done? And wouldn't a peacefully unified Korea be much more likely to welcome a continuation and deepening of the alliance with the United States than a war-devastated peninsula?

The clock continues to tick for North Korea. About ten months have now passed since the price reforms of last July. The time for the reformers in North Korea is running out fast. It is our chance to support a development that might finally lead to a gradual, controlled and peaceful change in a potentially dangerous country. We can prevent a humanitarian catastrophe, a destabilization of North East Asia, the proliferation of nuclear weapons.

It is goes without saying that such an approach would require courage, patience, and true statesmanship. But the chance is real, and it will be gone very soon. Increasing the pressure on North Korea by more sanctions, or even by doing nothing, would run against our interests and those of the people in the region.

North Korea has survived so many crises, it might as well be able to weather the storm triggered by failed reforms. But both people in and outside of the DPRK will have lost an important opportunity.

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