# Economic Reform without Losers: The Experience of the People's Republic of China and Its Applicability to North Korea

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# Economic Reform without (Absolute) Losers

- The meaning of economic reform
  - Introduction of markets in a centrally planned economy
    - Replacement of administrative allocation by market allocation
    - Replacement of administered prices by market prices
  - Removal of restraints on economic activities
  - Opening the economy to foreign trade and investment
- The meaning of losers
  - People who are worse off after the reform
  - hAbsolute losers versus relative losers
- Can economic reform be achieved without creating losers?
  - In principle, yes, with lumpsum taxes and transfers from potential winners to potential losers

# Economic Reform without Losers: The Desirability and the Difficulties

- The Desirability
  - Preservation of stability through respecting the status quo ante and protection of existing vested interests
  - Political support for economic reform is maximized ex ante
  - Political opposition to economic reform is minimized ex ante
  - Political opposition to the reversal of economic reform is maximized ex post
  - Maintenance of political power and control is facilitated
  - Potential downside losses and hence economic and political risks are minimized--the ideal way to implement a strategy of "feeling the stones to cross the river."
- The Difficulties
  - Imperfect information
  - Difficulty of targeting the potential winners and losers with general taxation schemes
  - Explicit lumpsum taxes and subsidies are virtually impossible
  - Costs of information and implementation

# Alternative Approaches to Economic Reform in Centrally Planned Economies

- The "Big-Bang" Approach
  - The central plan is abolished
  - All markets are instantaneously open
  - Producers are completely free to plan their production
  - Consumers are completely free to plan their consumption
- The "Pareto-Improving" Approach
  - The principle of "No Losers"
  - Compensation

# Implicit Principle of Chinese Economic Reform: No One Should be Made Worse Off

- "Grandfathering" of the status quo ante
  - Protection of "vested interests"
  - Discriminating between the old and the new, e.g. two-tiered wage system. Two prices for the same good
- Use of linked and separated markets
- Importance of new resources
  - Availability
  - Efficient utilization

# Sufficient Condition for Economic Reform without Losers

- The original prior allocation before the reform must be actually attainable given the endowment of goods, including enforceable entitlements, after the reform

# The Chinese Economy Today

| | 1979 | 1999 |
|---|---|---|
| | US$ | (1999 prices) |
| Real GDP | 172 bill. | 1.005 trill. |
| Real GDP per capita | 178 | 805 |

# Economic Performance: Pre-Reform (1952-1979) and Post-Reform (1979-)

| **Average Annual Rates of Growth of Selected Economic Indicators (%)** | | |
|---|---|---|
| | 1952-1979 | 1979-1998 |
| | Pre-Reform | Reform |
| Real GDP | 6.20 | 9.82 |
| Real GDP/Capita | 4.14 | 8.39 |
| Real Gross Value of: | 0.00 | 0.00 |
| Agricultural Production | 4.33 | 8.05 |
| Light Industry | 7.83 | 11.30 |
| Heavy Industry | 11.37 | 11.34 |
| Real Personal Consumption | 4.99 | 8.91 |
| Real Consumption/Capita | 2.96 | 7.51 |
| Real Gross Fixed Capital Formation | 11.43 | 11.10 |
| Capital Stock | 5.93 | 9.77 |
| Employment | 2.52 | 2.91 |
| GDP Deflator | 0.59 | 6.51 |
| Retail Price Index | 0.80 | 7.03 |
| Exports (in current US Dollars) | 10.98 | 14.66 |
| Imports (in current US Dollars) | 10.27 | 12.22 |

# The Chinese Economic Reform (1979-the present)

- The Open Door
  - International Trade
  - Foreign Direct Investment
- Marketization
  - Introduction of Markets in Goods, Factors and Foreign Exchange
  - Phasing Out the Plan

# The Chinese Economic Reform (1979-the present)

- Devolution of Economic Decision-Making Power (The Contract Responsibility System)
  - Empowering Provincial and Local Governments
  - Professional Management of Enterprises
  - Autonomy and Incentive

# The Chinese Economic Reform (1979-the present)

- Creation of New Modes of Organization for Production
  - Agriculture (1979)--Abolition of communes; the return to a system of individual cultivators with fixed rents and taxes
  - Industry (1984)--Emergence of “Township and Village” enterprises (TVEs); (foreign) joint-venture, foreign and private enterprises
  - Corporatization of state-owned enterprises (1997)

# Marketization: Domestic Prices

- The prices of all consumer goods and more than 99% of the producer goods are determined in the market (with the exception of within plan outputs of coal, natural gas, and steel)
- Only three agricultural commodities--grains, cotton, and tobacco--remain under the central plan
- The price of low-grade grain is controlled (subsidized)
- The price of energy is at world market levels
  - The prices of oil and gasoline are freely determined in the market
- China has been taken off the “non-market economies” list of the European Union (12/97)
- Liberalization of interest rates (8/2000)

# Marketization-Agriculture

| Table 2. Phasing Out the Planned Track: Agricultural Goods (% of output value) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | |
| | **1978** | **1985** | **1986** | **1987** | **1988** | **1989** | **1990** | **1991** | **1992** | **1993** |
| **Transactions at plan prices** | **94.4** | **37** | **35** | **29.4** | **24** | **35.5** | **31** | **22.2** | **12.5** | **10.4** |
| **Transactions at market prices** | **5.6** | **63** | **65** | **70.6** | **76** | **64.5** | **69** | **77.8** | **87.5** | **89.6** |

# Marketization-Industry

| Table 3. Phasing Out the Planned Track: Industrial Goods (% of output value) | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | **1978** | **1985** | **1989** | **1990** | **1991** | **1992** | **1993** |
| **Transactions at plan prices** | **100** | **64** | **60** | **44.6** | **36** | **18.7** | **13.8** |
| **Transactions at market prices** | **0** | **36** | **40** | **55.4** | **64** | **81.3** | **86.2** |

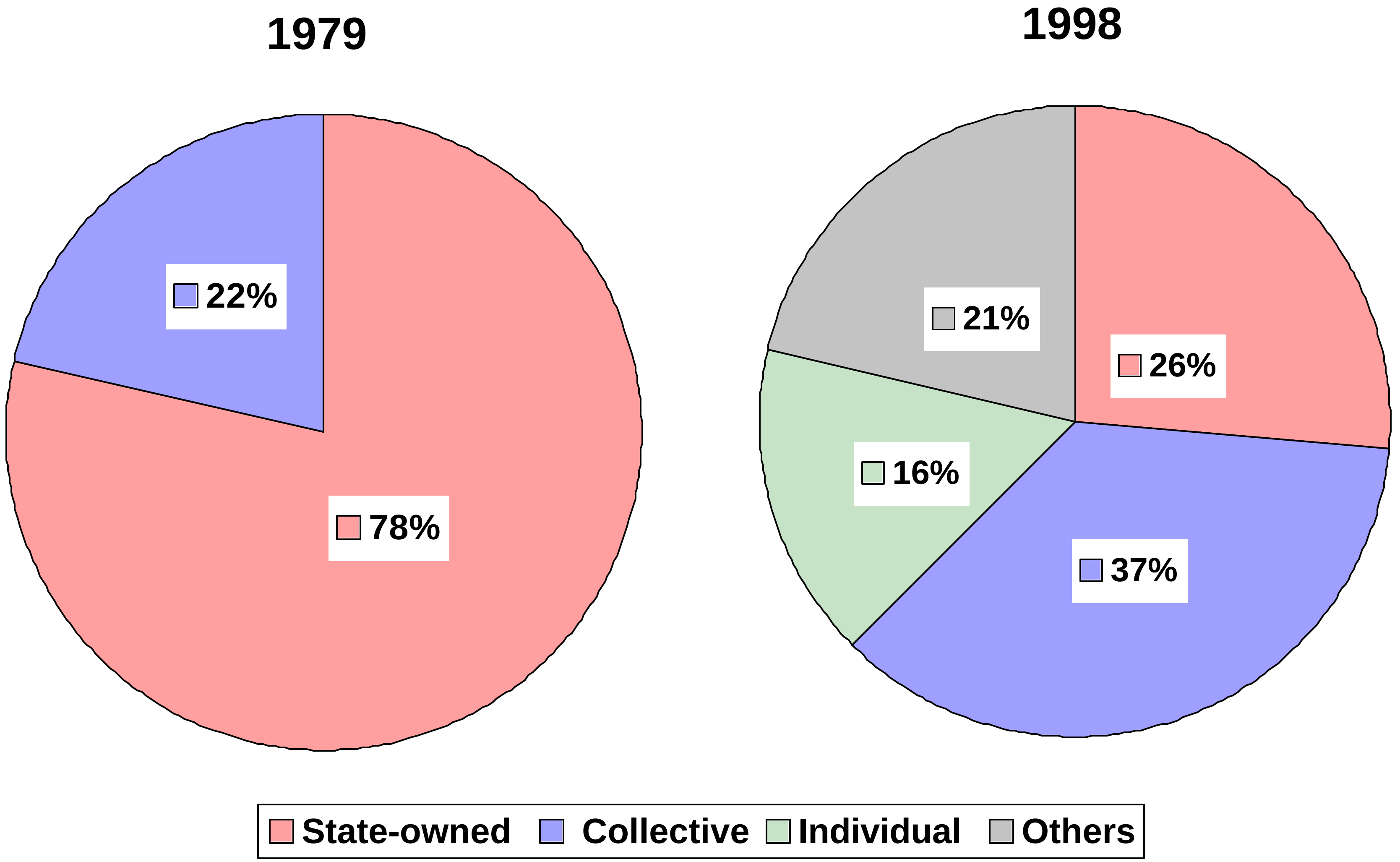
# Marketization-Retail

| Table 4. Phasing Out the Planned Track: Retail Sales (% of sales) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | |
| | 1978 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 |
| Transactions at plan prices | 97 | 47 | 35 | 33.7 | 28.9 | 31.3 | 30 | 20.9 | 5.9 | 4.8 |
| Transactions at market prices | 3 | 53 | 65 | 66.3 | 71.1 | 69.7 | 70 | 79.1 | 94.1 | 95.2 |

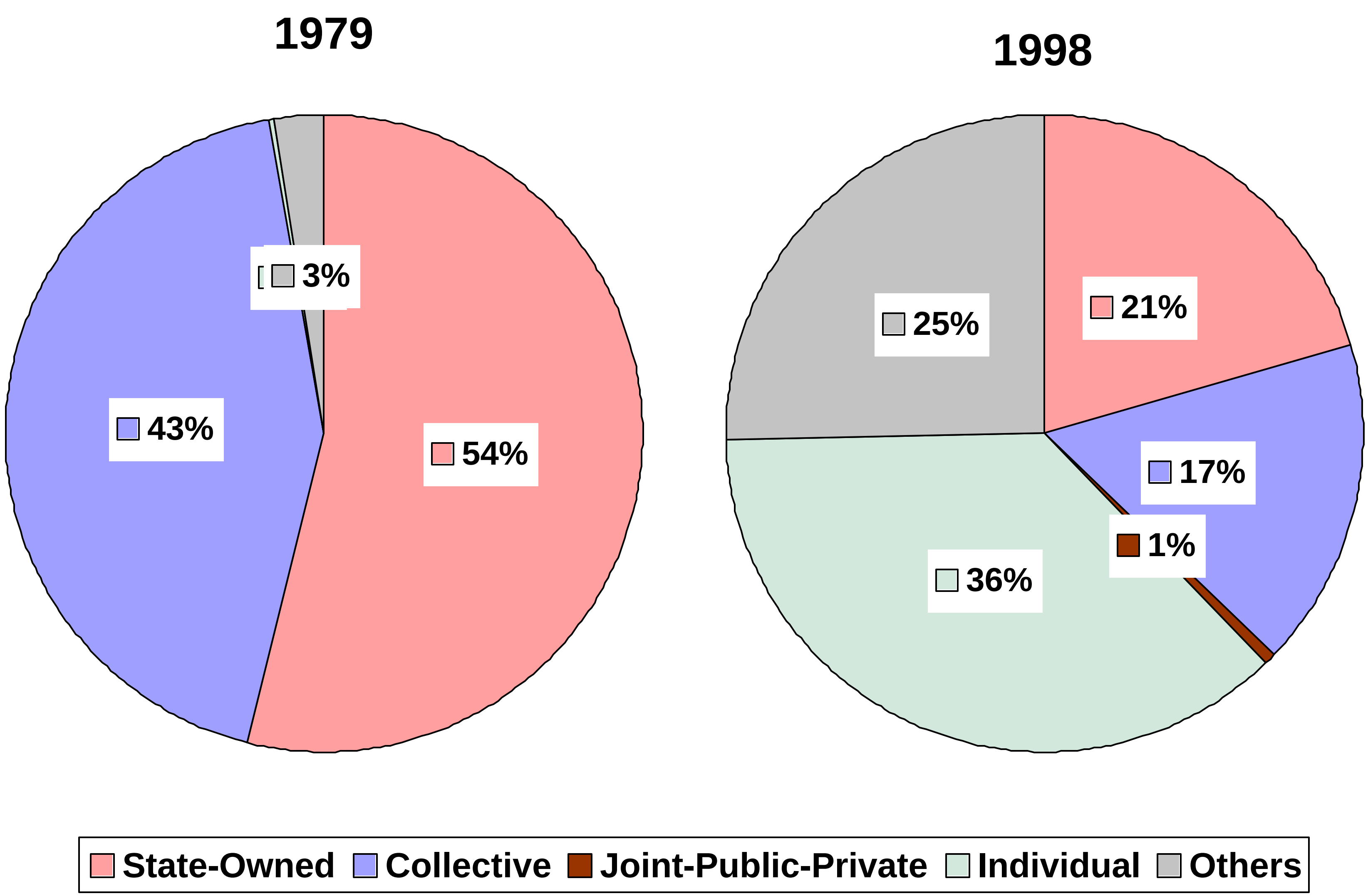
# Marketization: Foreign Exchange

- Unified exchange rate since 1/94
- Interbank market in foreign exchange established 4/94
- Current account convertibility since 12/96
- Exporters permitted to retain 15% of foreign exchange proceeds as of 10/97
- However, full capital account convertibility unlikely in the near future

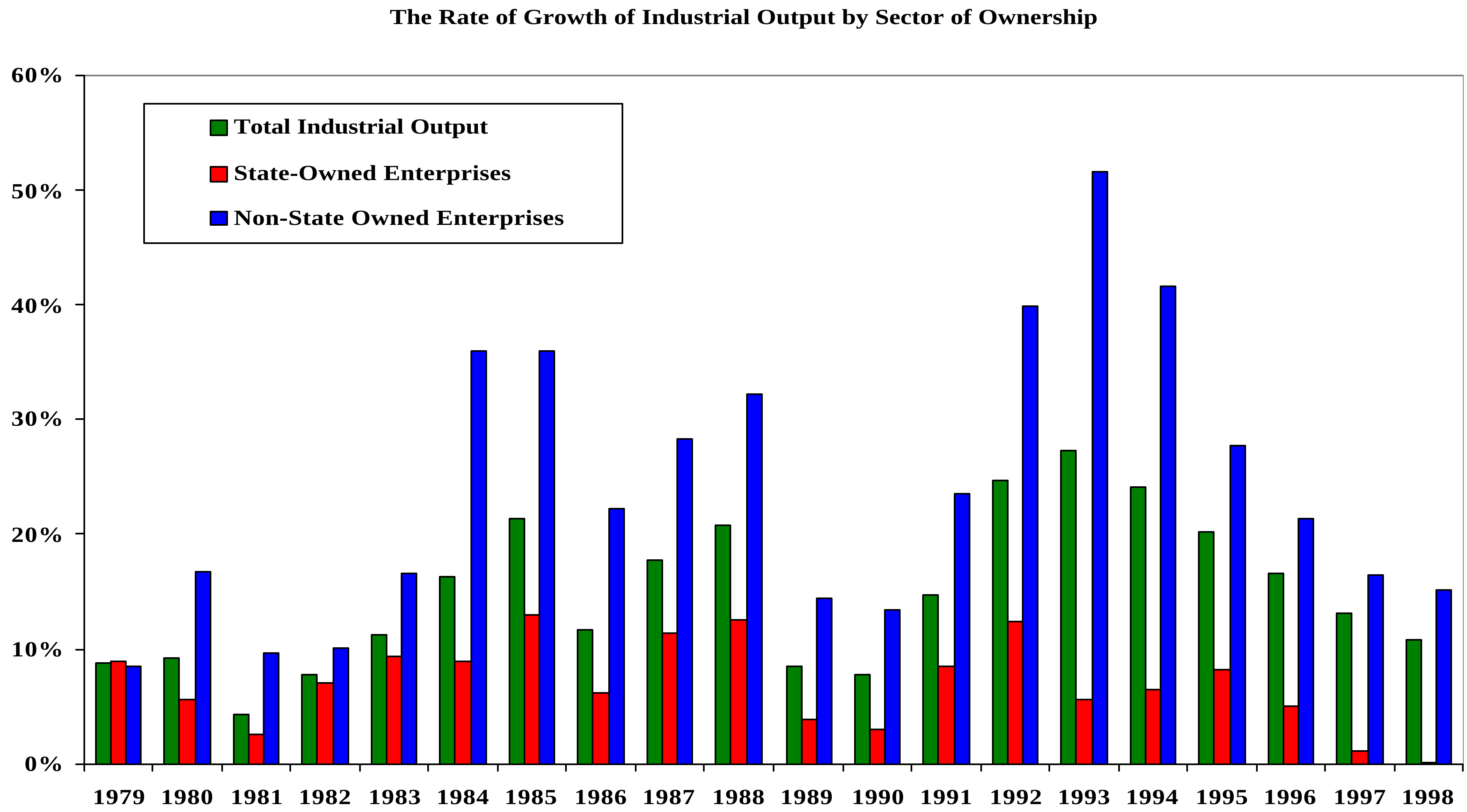
# The Growth of the Non-State Sector-Gross Value of Industrial Production by Ownership



# The Growth of the Non-State Sector-Gross Value of Retail Sales by Ownership



# The Growth of Industrial Output by Sector of Ownership



# The Private Sector

- Private enterprises accounts for approximately 11% of GDP in 1998
- Private agriculture accounts for approximately 17% of GDP in 1998
- Proposed constitutional change to be enacted by the National People's Congress (Chinese parliament) recognizing that the private sector is "an important part of the socialist market economy" thus giving it increased acceptance and legitimacy
- The non-state sector accounts for approximately two-thirds of GDP in 1999

# Examples of Economic Reform Without Losers from the Chinese Experience

- (1) The agricultural reform
- (2) The industrial reform
- (3) The introduction of the Foreign Exchange Certificates
- (4) The foreign exchange reforms
- (5) Special economic zones, material processing and assembly, and foreign direct investment
- (6) The tax reform of 1994
- (7) The furloughing of the surplus labor of state-owned enterprises

# Mechanisms for Achieving Economic Reform without Creating Losers

- The “Dual-Track” approach to transition from a centrally planned to a market economy
  - Maintenance of the plan track
  - Introduction of the market track

# The Dual-Track Approach (1): A Centrally Planned Economy

- Enterprises and households are assigned rights to and obligations for <u>fixed quantities</u> of commodities at <u>fixed plan prices</u>
- The rights and obligations are enterprise- and household-specific
- They can be interpreted as simultaneous put and call options held by the producers and users respectively but exercisable at the same fixed plan prices
- There are governmental sanctions for failure to fulfil the obligations under the plan

# The Dual-Track Approach (2): Introduction of the Market

- The "Plan Track"--the pre-existing central plan remains intact and its rights and obligations continue to be enforced by the government
- The "Market Track"--the market is instantaneously open, with price determined by supply and demand
- Producers are given autonomy and incentive to plan their production and participate in the market (at the margin), and be the residual claimant to any profit, provided obligations under the plan are fulfilled
- Consumers are completely free to plan their consumption and participate in the market, given allocated consumption goods and fulfillment of labor obligations

# The Dual-Track Approach (3): Minimal New Informational and Institutional Requirements

- The "Dual-Track" approach utilizes the existing information contained in the original plan and does not require new information for the implementation of the implicit compensatory scheme
- The "Dual-Track" approach can be implemented by enforcing the original plan through existing institutions (e.g., the state planning commission). No new institutions (e.g., a national revenue service, or a social welfare agency) are necessary

# Two Types of Dual Tracks (and Two Types of Market Liberalization)

- Separated Dual Tracks (Limited Market Liberalization)
  - No transactions across tracks are permitted
  - Market resales of plan-allocated goods by either enterprises or households are not permitted
  - Market purchases by planned suppliers for fulfilling plan-mandated delivery quotas (e.g. sub-contracting) are not permitted
- Linked Dual Tracks (Full Market Liberalization)
  - Market resales and market purchases for redelivery are all allowed by a planned supplier or a rationed user, as long as the rights and obligations under the plan are all fulfilled

# Dual-Track Approach Leads to Pareto-Improvement

- (1) The dual-track approach with either limited or full liberalization of the market track is Pareto-improving; and
- (2) The dual-track approach with full liberalization of the market track achieves economic efficiency.

# Limited Market Liberalization

- Efficiency cannot be achieved because
  - Inefficient suppliers will continue to supply after the economic reform
  - Inefficient rationed users will continue to consume after the economic reform
  - There will in general be over-production
- Full market liberalization is necessary for economic efficiency

# Conditions for Pareto Optimality and Efficiency

- (1) the feasibility of the original plan;
- (2) the granting of autonomy and incentive to economic agents for their participation in the market on the margin;
- (3) full market liberalization--the allowance of resales of plan-allocated inputs, purchases of outputs for redelivery and subcontracting; and
- (4) the continued credibility of the state in both enforcement of the rights and obligations under the original plan and commitment to non-ratcheting

# The Agricultural Reform of 1979: An Application of the Dual-Track Approach

- The contract responsibility system:
- The commune is assigned the <u>responsibility</u> to
  - (1) sell a fixed quantity of grain (or other) output to the state procurement agency as previously mandated under the plan at predetermined (plan) prices and
  - (2) to pay the previously plan-mandated fixed amount of taxes to the state
- It is also assigned the <u>right</u> to
  - (3) receive the previously plan-mandated fixed quantity of inputs, principally chemical fertilizers, from state-owned suppliers, again at predetermined (plan) prices.
- Subject to fulfilling these conditions, the commune is granted
  - Autonomy in production and sale decisions
  - Incentive as the residual claimant to any profit

# The Agricultural Reform

- The commune reassigns the collective responsibilities and rights to the individual farm households, allocating to them their shares of the commune's land (on a 15-year lease) and capital, and chemical fertilizers, and making them individually and directly responsible for the fulfillment of their shares of the delivery quota and taxes.
- For Chinese agricultural reform, the dual tracks are linked--market purchases by planned suppliers for fulfilling plan-mandated delivery quotas and taxes are allowed

# The Agricultural Reform: No Losers

- The commune and its individual members were no worse off
- The state was no worse off
- As long as the state was not worse off in terms of the quantities of grain and other outputs and taxes delivered to the state, it would continue to be able to supply the urban consumers with food grains and industries with agricultural raw materials (such as cotton) at plan prices, with the consequence that even the urban consumers and industrial enterprises would be no worse off
- Thus, the agricultural reform would be Pareto-improving for all parties as long as the original plan was effectively enforced

# Examples from the Chinese Experience: Linked Dual Tracks--Industry

- Plan track at the enterprise level
  - The plan-mandated delivery quotas as well as the quantities of plan-allocated inputs for each enterprise and their plan prices were frozen at their then-existing levels
  - Fixed plan taxes and profit remittances
- Market track at the enterprise level
  - Contract responsibility system--must fulfil plan-mandated delivery quota, profit remittances and taxes
  - Autonomy in production decisions
  - Incentive as the residual claimant
  - Prices on the market track are freely determined in the markets
  - Market purchases of output to fulfill the delivery quota is permitted (an example of full market liberalization); enterprises are not required to actually produce the output itself
  - Entry of new enterprises

# The Industrial Reform: No Losers

- Planned profits and losses (taxes and subsidies) of enterprises remain the same
- Differences between plan and market prices make feasible lumpsum transfers
- Continued employment of workers by SOEs provides social safety net
- Continued planned consumer goods deliveries enable the maintenance of the pre-reform standard of living as a floor
- Thus, the "dual-track" approach is by definition Pareto-improving as long as the original plan is effectively enforced
- The post-reform real output is more likely to rise than to fall

# Examples from the Chinese Experience: Foreign Exchange Certificates

- The Foreign Exchange Certificates (FECs) were required to be used by foreign tourists from 1985 to 1994
- They were available at fixed plan exchange rates
- Certain goods could only be purchased with FECs
- One objective of the FECs is to prevent the purchase of imported goods or goods produced for exports by the domestic population
- Another objective is to permit price discrimination (The price in FEC and the price in Renminbi could be different)
- The impact on the domestic economy as a result of tourism was minimized
- An example of separated dual tracks

# Examples from the Chinese Experience: Swap Market for Foreign Exchange

- Plan track
  - Centralized foreign exchange receipts through centralized export operations
  - Central reallocation of available foreign exchange at fixed plan (official) exchange rate
  - Compensation for changes in the plan (official) exchange rate
- Market track
  - Swap market for qualified exporters and importers at market exchange rate
  - Retentions by foreign exchange earners at the margin
- There are no losers--enterprises, the state (urban and rural consumers) so long as the plan is enforced
- An example of linked dual tracks

# Phasing out the Dual Tracks: Unification of the Foreign Exchange Markets

- The official and swap markets were unified on January 1, 1994 at the swap market rate
- Foreign exchange certificates were abolished at the same time
- 5-year lumpsum subsidies for establishments with plan-allocated foreign exchange at the pre-reform exchange rate
- One cannot say that there were no losers because the lumpsum subsidies were not forever but a 5-year phase-out period, given the high rates of time preference in China, contributed greatly to the smoothness of the transition

# Export Processing Zones and Special Economic Zones: Separated Markets

- Special Economic Zones
  - Minimization of interaction with and hence disruption of the domestic economy
  - Material processing and assembly activities (all of the inputs, except labor, are imported and all of the outputs are exported)
  - No disruption to the domestic economy, labor being in surplus
  - Labor is hired indirectly through labor subcontractors, paid a plan track wage rate but the foreign investors charged a market track wage rate
  - The same rule applied to foreign and joint-venture enterprises operating in China (subcontracted employment of labor, export requirements)
- There are no losers--foreign investors, domestic enterprises, the state, and the workers--so long as the separation is enforced
- In time, the enterprises in the special economic zones as well as foreign and joint-venture enterprises were allowed to buy and sell on the domestic market at market prices--there are still no losers so long as the plan is enforced

# Examples from the Chinese Experience: The Tax Reform of 1994

- A nation-wide value added tax was introduced
- The fiscal contracting system under which the provinces would collect the taxes, sent a fixed amount to the central government and retained the rest was replaced by direct collection by a national revenue service and revenue-sharing
- The provincial governments were guaranteed revenue no less than that of their 1993 actual expenditures for the three years between 1994 and 1996.

# The Furloughing of the Surplus Labor of State-Owned Enterprises

- Overpaid relative to the market wage rate
- Furloughed at a percentage of their pre-existing wages with their benefits (housing, education, health care) intact
- Autonomy to seek alternative employment (at the market wage rate) or to become self-employed or to withdraw from the labor force
- Neither the enterprise nor the workers are worse off

# Efficient Utilization of New Resources: Economic Reform without Losers

- New enterprises and new activities have been responsible for the phenomenal economic growth of China
- Old enterprises did not lose
  - Continued “subsidies” for “planned losses”
  - Little or no privatization of existing enterprises
  - Little or no restructuring of existing enterprises
- High domestic saving rates of 35-40% provided the new resources and makes it less necessary to redeploy old resources
- Almost 90% of the fixed capital stock in 1999 is due to gross fixed investments made since 1979
- A real GDP expanding at 10% p.a. makes it much easier to assure that there are no losers
- Growing out of the “Plan”--the planned sector shrinks relatively as the aggregate economy grows at 10% p.a.

# The Importance of the Point of Reference

- While it is possible to achieve economic reform without losers with a single stage reform, it is in general difficult to assure that there are no losers at every stage of sequential economic reforms,e.g.:
  - from limited market liberalization to full market liberalization
  - extension of special economic zone privileges to the entire country

# Examples of Prospective Reforms

- Housing reform--raising rents to market levels coupled with a simultaneous and equivalent increase of salaries
- Pension reform--transition from an unfunded (pay-as-you-go) system to a defined contribution, fully vested individual account system
  - Perpetual floating-rate bonds so that the transition costs are shared by all future generations
- Chinese accession to the World Trade Organization--lowering tariffs on automobiles may drive some Chinese automobile manufacturers out of business
  - The Chinese automobile manufacturers can be given the right to sell the same number of automobiles, at the pre-WTO price, to the pre-WTO purchasers

# Is Chinese Economic Reform Gradualist?

- Chinese economic reform appeared gradualist because
  - (1) sequencing of reform by sectors--agriculture, industry, international, labor and capital
  - (2) the population is protected from shock because of the policy of no losers
- For each of the sectors the markets were opened instantaneously just like "Big Bang"

# Summing up the Chinese Experience

- Economic reform without losers is possible
- Credibility of the state is essential for its success
- Moreover, economic efficiency can be achieved under certain conditions (e.g., linked dual tracks or full market liberalization)
- Economic reform without losers actually increases the probability of its own success by helping to preserve political and social stability
- Political and social stability are essential for the success of any economic reform
- Political power and control can be maintained
- The speed of transition depends on the availability of new resources for new economic activities

# Applicability to the North Korean Economy (1)

- Initial economic conditions (e.g., GDP per capita) are comparable
- Credibility of the state
  - Ability to enforce contracts
  - Commitment to non-ratcheting
  - Multiple equilibria (outcomes) possible
- Availability of new resources
  - High prospective saving rate
  - Human capital
  - Infrastructure
  - The role of South Korea

# Applicability to the North Korean Economy (2)

- "Economic Reform without Losers" is compatible with the self-interest of the North Korean government
  - (1) Preservation of political and social stability through a policy of no losers
  - (2) Separation of economic reform from political reform
  - (3) Survival of existing government not threatened by economic reform--economic progress per se does not necessarily imply loss of political power
  - (4) Reform has long-term benefits appropriate to the time horizon of the current North Korean leader, Kim Jong-Il