5. Explaining the output fall.
Real GDP trends in transition economies after liberalization

GDP index

China 1983 = 100
Poland 1989 = 100
Romania 1989 = 100
Latvia 1990 = 100
Russia 1991 = 100

Number of years after liberalization

0 1 2 3 4 5 6 7 8 9
Countries recovering after an initial output fall

![Graph showing GDP recovery over years after liberalization for various countries. The x-axis represents the number of years after liberalization, ranging from 1 to 9. The y-axis represents the GDP index, ranging from 0 to 120. Symbols and lines indicate different countries, such as Hungary (1989=100), Poland (1989=100), Slovenia (1989=100), Czech Rep. (1990=100), Slovakia (1990=100), Croatia (1991=100), and Estonia (1991=100).]
Countries experiencing an initial output fall and uncertain recovery

- Bulgaria 1990=100
- Romania 1989=100

GDP index vs. number of years after liberalization
Countries experiencing a very strong output fall and a slow recovery

GDP index

number of years after liberalization

Latvia 1990=100

Lithuania 1990=100
Countries experiencing a continuous output fall

- Russia 1991=100
- Ukraine 1992=100
- Belarus 1991=100

GDP index

number of years after liberalization
• Output fall after big bang liberalization. Why?
Explanations for output fall.

• Statistical illusion due to underreporting of private sector (Berg and Sachs, 1992) or overreporting under socialism (Winiecki, 1991; Aslund, 1994).
  Problems: more underreporting under communism, in FSU rise of hidden economy came later); in Poland and Hungary, overreporting not issue since mandatory planning had been abolished.

  Problem: Russia had no excess stabilization!
• Contraction faster than expansion (Gomulka, 1992; Kornai, 1993)

Problem: few signs of excess contraction in declining sectors except in East Germany, rather across the board falls in output.

• Credit crunch (Calvo and Coricelli, 1992).
  Yes, but interenterprise arrears and continued soft budget constraints.

• Labor market frictions (Atkeson and Kehoe, 1995).
  Problem: unemployment came after output fall.
Most plausible explanations.

Wei (1995): transformation of single monopoly into multiple Monopolies => higher prices and lower quantities because upstream monopolies do not internalize downstream externalities (higher prices of input downstream lead to higher prices and lower sales compared to single vertically integrated monopoly.)

Assume enterprise has 2 suppliers, pays price of 50 to each and sells at 150 with profit = 150 –50 –50=50. Assume indivisible technology (if one supplier leaves, output =0). Say one supplier has outside option of 100 => ends the contract. Total surplus gain for all players: + 50 –100 = -50.

With efficient bargaining, supplier could be brought back but his outside option may not be verifiable. Under asymmetric information, enterprise would have to pay 100 each (infeasible).
Roland and Verdier (2000): liberalization is freedom to change contracts. Firms search for new partners. If investments are specific to the partnership, investment takes place only once new long term partners are found. In the absence of established markets, search can take time.

Dual-track liberalization avoids the disruption while allowing for search for new partners.