TRANSITION

1. TASKS OF TRANSITION.

- Liberalization, development of markets and allocative shifts
- Stabilize macroeconomy if preexisting aggregate imbalance
- Privatize (change incentives toward profit maximization).
- Introduce new institutions (fiscal administration, legal code and court system, central bank, financial system).

Constraints:

- uncertainty of outcomes. No preexisting transition theory. Outcome could be close to West German miracle …

… or Weimar republic

…or Yugoslav scenario

Initial controversies on this but reality has shown huge aggregate difference in outcomes.

- Complementarities between reforms.

Ex: incentive changes and liberalization.
Complementarities: argument for big bang approach.

- Political constraints.

  Winners and losers even if aggregate gain.

2. STYLIZED FACTS OF TRANSITION.

1. Difference in reform paths and strategies.

Main difference: gradualism in China vs. big bang in Central and Eastern Europe.

Liberalization usually big bang (with exception of Hungary and Slovenia)

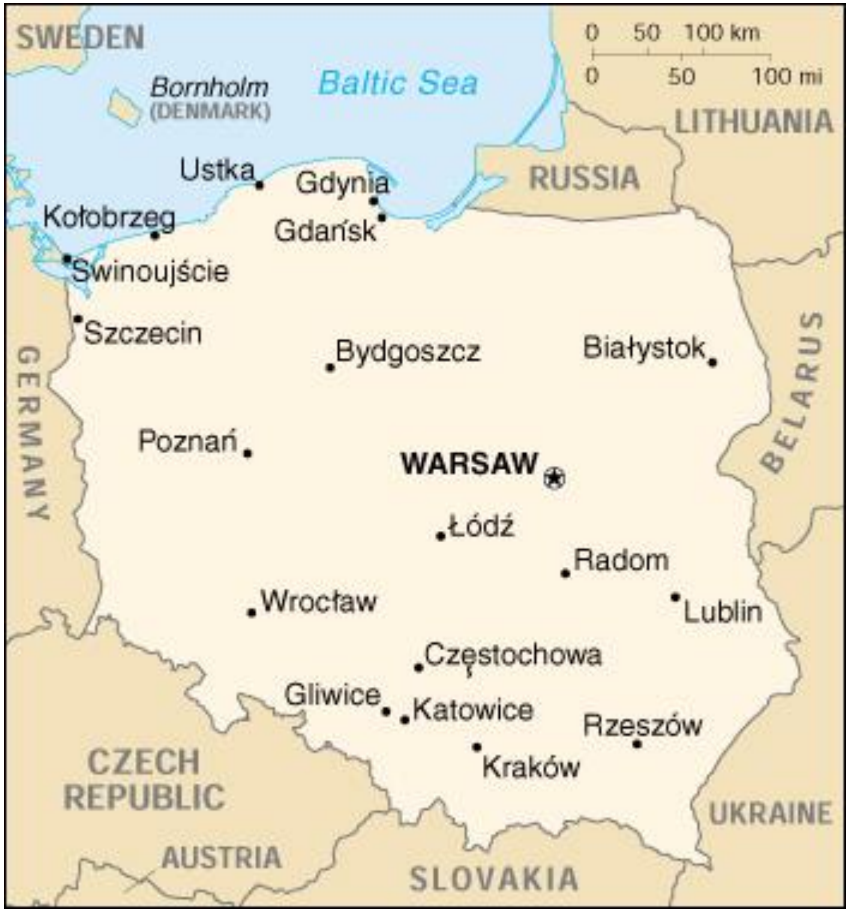
Restructuring gradual and late in reform process.

Two waves in Eastern Europe:

1) 1990: Poland, Hungary, Czechoslovakia, Romania
2) 1992: Former Soviet Union.

Late starters had greater difficulties.

Poland (39 million inhabitants).



Initial situation:
Poland became independent again after WWI. Agrarian (and catholic) country.

1956 uprising. Agriculture remained private.
1970 disturbances. Heavy indebtment and investment in the 80's.
1980. Solidarity created (became legal!).

Transition start.

June 1989 elections. Solidarity won all the free seats. Mazowiecki government August 24: mainly non communist coalition. Balcerowicz finance minister.

Shock therapy.

1. Stabilization policy.

- Budget deficit from 8% of GDP to -.5 % in 1990. Subsidies reduced from 16% of GDP to 7%.
- Zloty devalued to black market rate.
- Inflation reduced from 250% in 1989 to 585% in 1990 and 70.3% in 1991.
- Wage freeze: popiwek (prohibitive tax on wage increases).

2. Liberalization. January 1990.

3. Privatization. Bill passed in July 1990. Liquidation plus joint stock company status plus mass privatization plan (vouchers for enterprises owning mutual funds with a blockholder threshold of 20%). In practice, mass privatization delayed for years and implemented at a smaller scale. Gradual privatization ensued.

4. Tax reform only in 1993. Problem of tax collection.
5. Banking reform in 1993. Consolidation program with debt-equity swap for bad loans.

Political evolution in Poland.

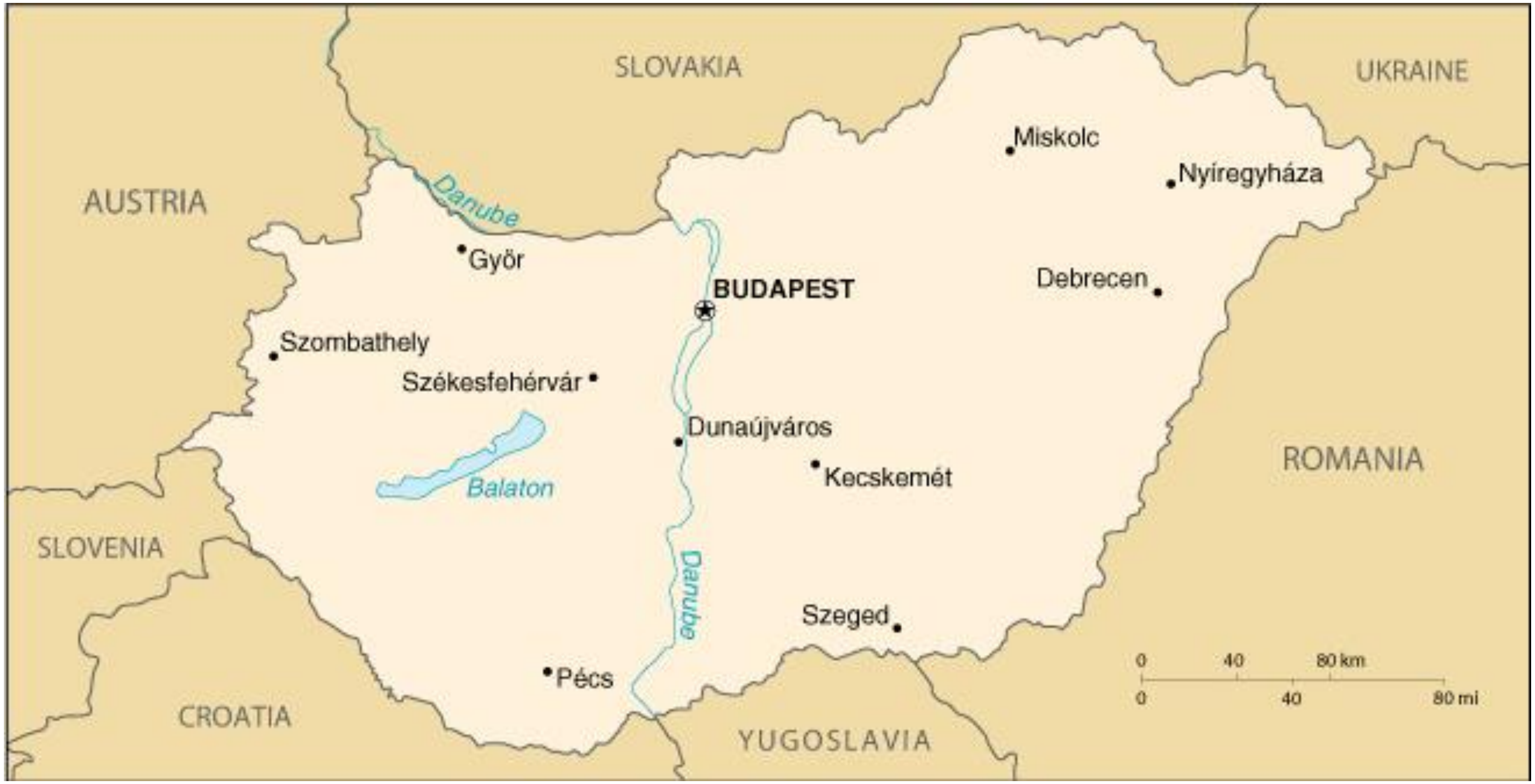
Mazowiecki government did not survive the 1990 election campaign. Walesa promised acceleration of privatization.

1991: Bielecki government with bold mass privatization plan. Government instability between 1991 and 1993.

1993-97: left wing coalition with brake on privatization program and also good growth performance.

1997-2001: right wing coalitions. Left won in 2001.

Hungary (10 million):



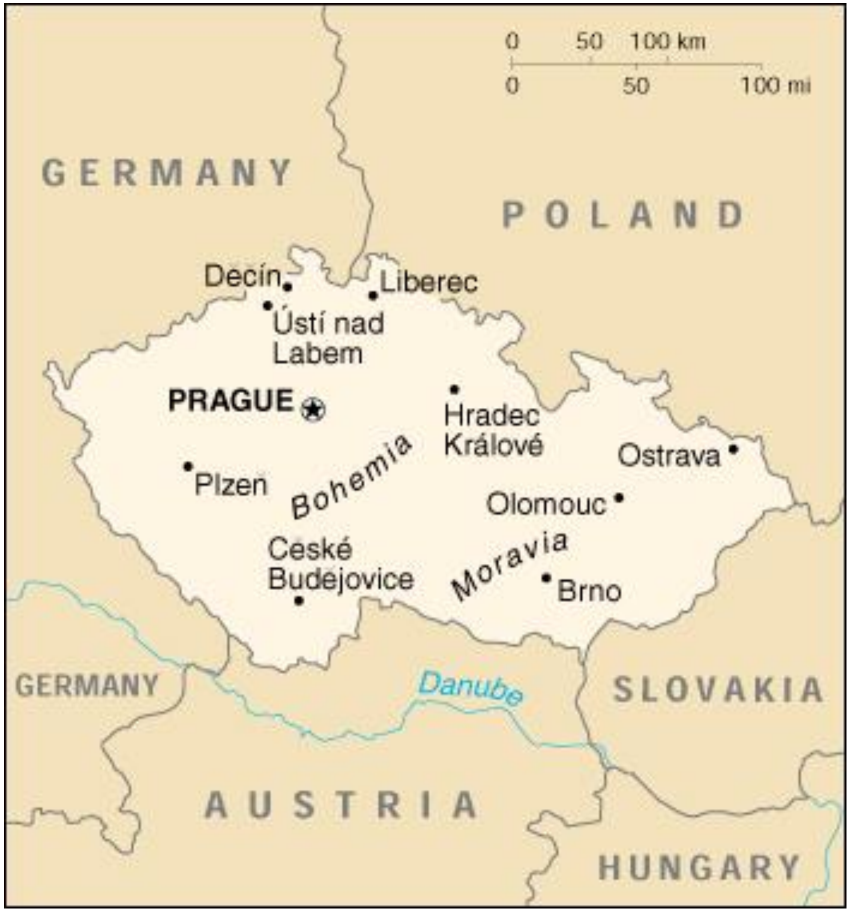
Initial situation:
1956 uprising.
1968 reform under Kadar: “Gulash communism”.

Transition start:

- important liberalization and entry before 1989. “Market socialism”. Tradition of FDI.
- tax reform in 1987 establishing income tax.
- April 1990 elections: nationalist coalition (Antall) plus small freeholder party). Lasted until 1994. Far-reaching liberalization plus gradual privatization and radical bankruptcy reform (harakiri clause) in 1992 (lasted only 1 year). Repeated bank bailouts.

-1994-98: former communist plus liberals. Achieved stabilization.

Czech republic (10 million):



Initial conditions:

Czechoslovakia created in 1918.

Invaded by Nazis in 1938. Income per capita 75% that of France and 10% higher than Austria.

Communist regime in 1948.
Prague spring in 1968 (Dubcek). Soviet tanks in August 1968.
Important dissident movement in 70's (intellectuals: Havel).

Transition start.
Velvet revolution. Communists resigned.
December 28: Dubcek leader of Parliament and Havel president of the republic.

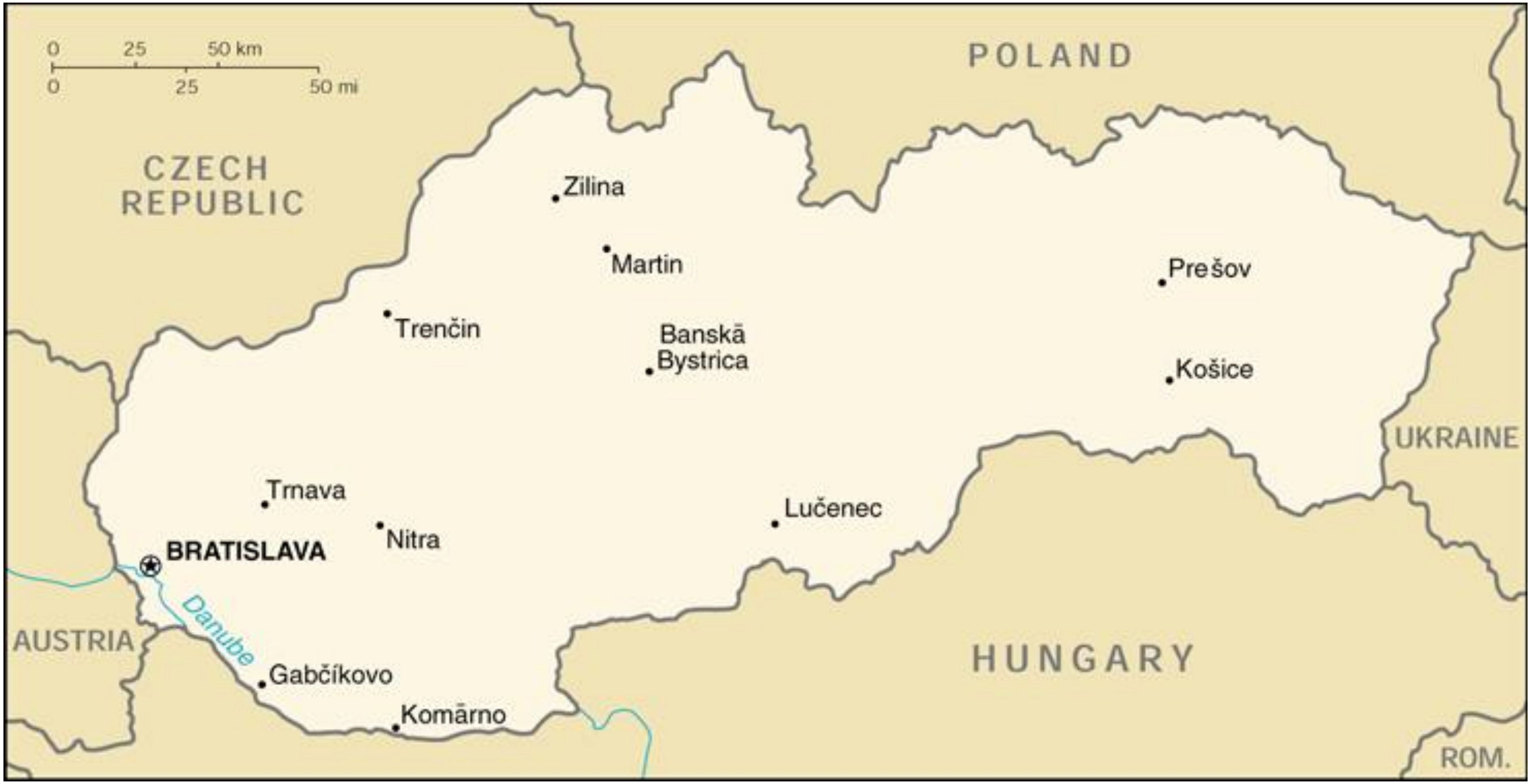
June 1990 elections. Klaus finance minister.
Liberalization: January 1991 with compensation transfers.

Mass privatization via voucher scheme. Implemented in 1992.
Klaus won 1992 elections and became prime minister.
Split of Czechoslovakia decided in 1992.

Bankruptcy reform only in 1993.

1996-97: devaluation and austerity package. Poor banking sector.

Slovakia (5.4 million):



Disagreements in Czechoslovak Parliament. Slovakia had heavy arms industry producing for USSR. => Heavy restructuring burden expected.

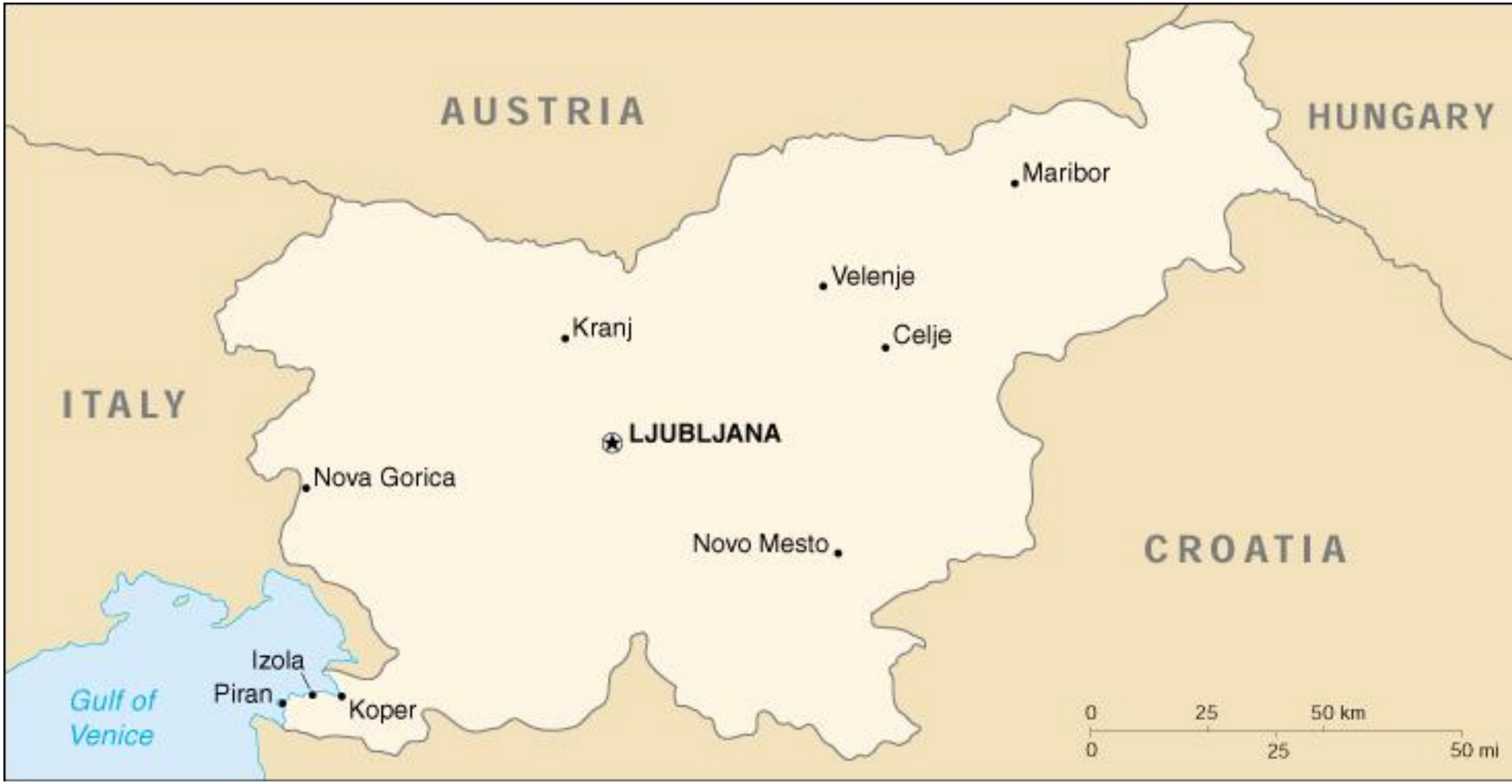
Meciar.

Split in 1993.

Brake put on privatization program. Issues of democracy, minority rights…

Elections of 2002 seem to show that democracy is consolidating.

Slovenia (2 million)

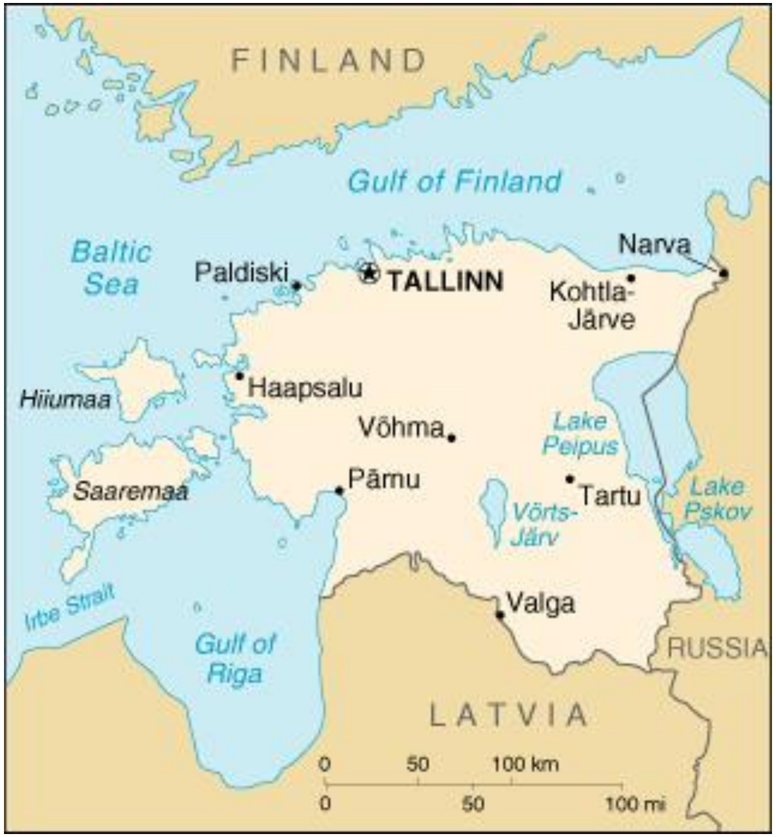


Initially part of Yugoslavia. Had been part of
Austro-Hungarian empire (like Croatia). Independent since 1991.

Example of gradual strategy to capitalism based on entry, cautious privatization and liberalization. (ex: capital account restrictions)

Corporatist style institutions with minimum wages and high taxation but moderate wage growth.

Estonia (1.4 million)



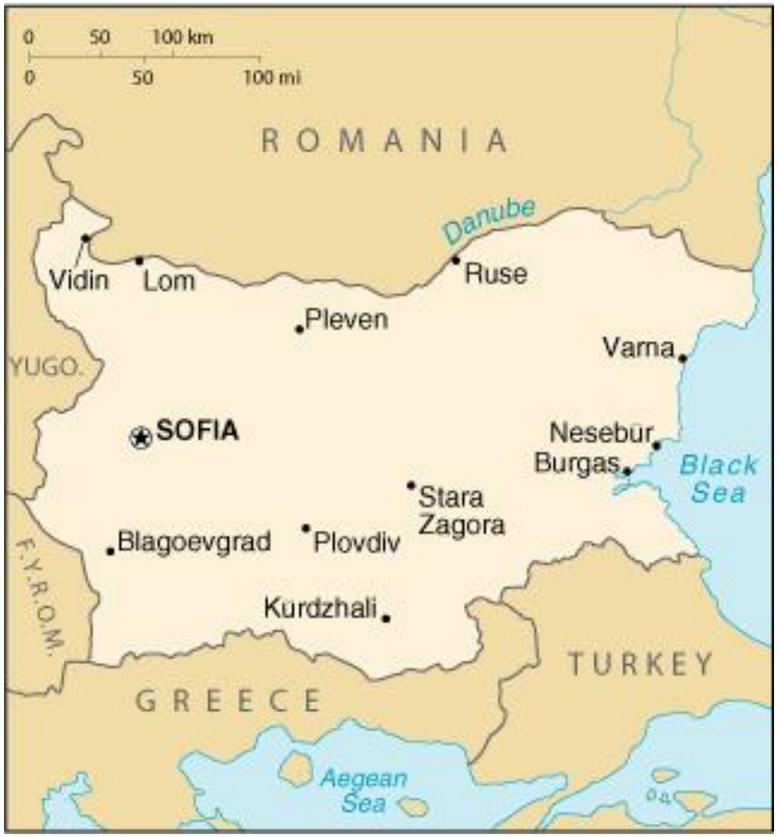
Independent from Russia in 1918 but only until 1941.
Broke away from USSR in August 1991.

Big bang approach to reform.

Liberalization, drastic stabilization (currency board),
fast privatization via auctions to outsiders, politics dominated
by right-wing since beginning of transition

Entered the first wave of applicants to EU (with Poland, Hungary,
Czech republic, Slovenia)

Bulgaria (7.7 million)



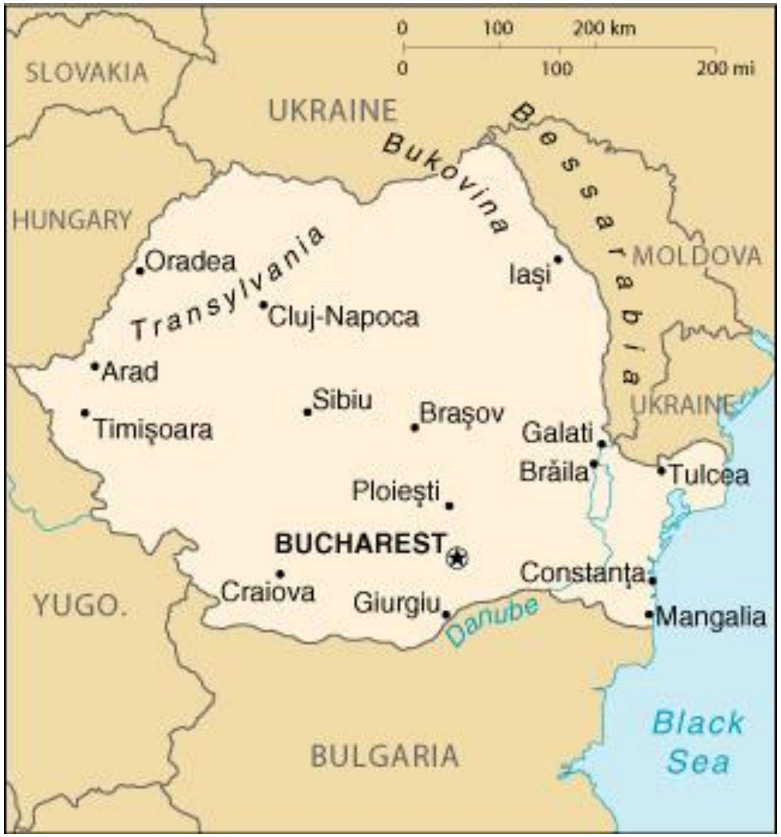
Was part of Ottoman empire until 1878. Big Turkish minority.

Political instability. Communists in government mostly except 1992 and since 1997.

Reforms started later and more half-heartedly.
Liberalization in 1991 but privatization started only in 1994.
Bankruptcy reform and banking reform only in 1994 and 1997 respectively.

Strong reversal of liberalization in 1994-97.

Romania (22 million)



Belonged to Ottoman empire until mid 19th century

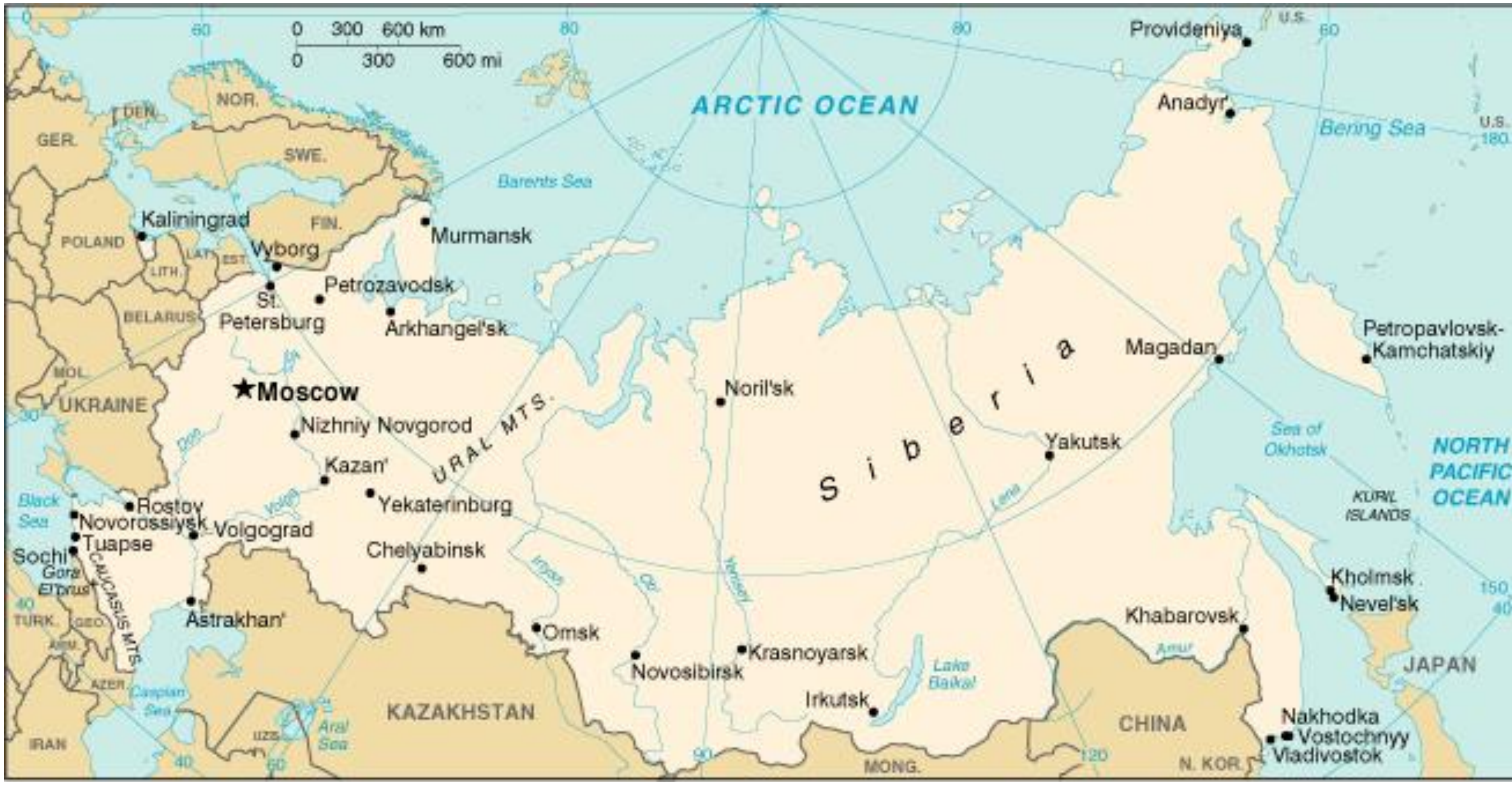
Ceaucescu ousted by Iliescu and national Salvation Front.

Prices partly liberalized in November 1990 (together with large devaluation of currency like in Poland)but chaotic movement of protests, price freezing and liberalization between 1991 and 1993.

Mass privatization announced in 1991 but delayed endlessly like in Poland.

Little progress in banking reform and soft budget constraints of banks and enterprises.

Russia (146 million):



Young nation. Invaded by Tatars for centuries (until 16th and Ivan the Terrible), Russian expansion started in 18th century.

Serfdom until most of 19th century.

Tsarist regime collapsed in February 1917. Bolchevik revolution in October.

USSR until 1991.

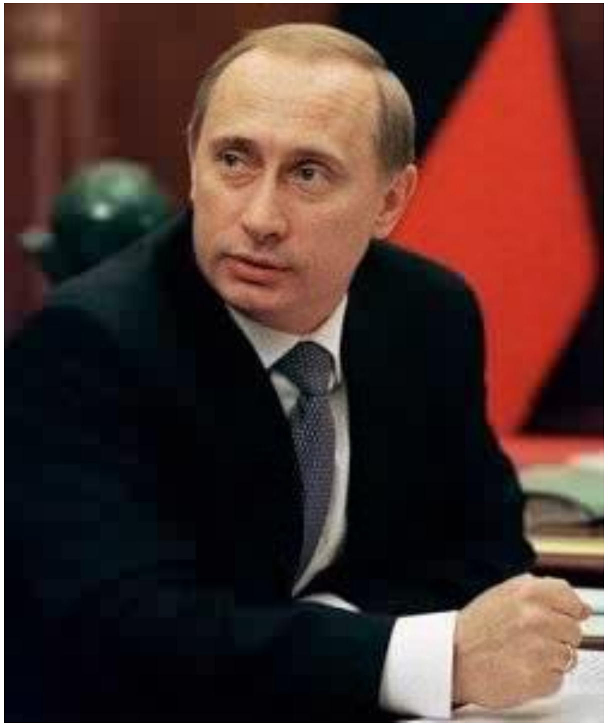
Gorbachev reforms: 1985-91.
Failed coup in August 1991.
Collapse of Soviet Union.
Eltsin takes command of Russia.

Price liberalization in January 1992 and failed stabilization (until 1995)

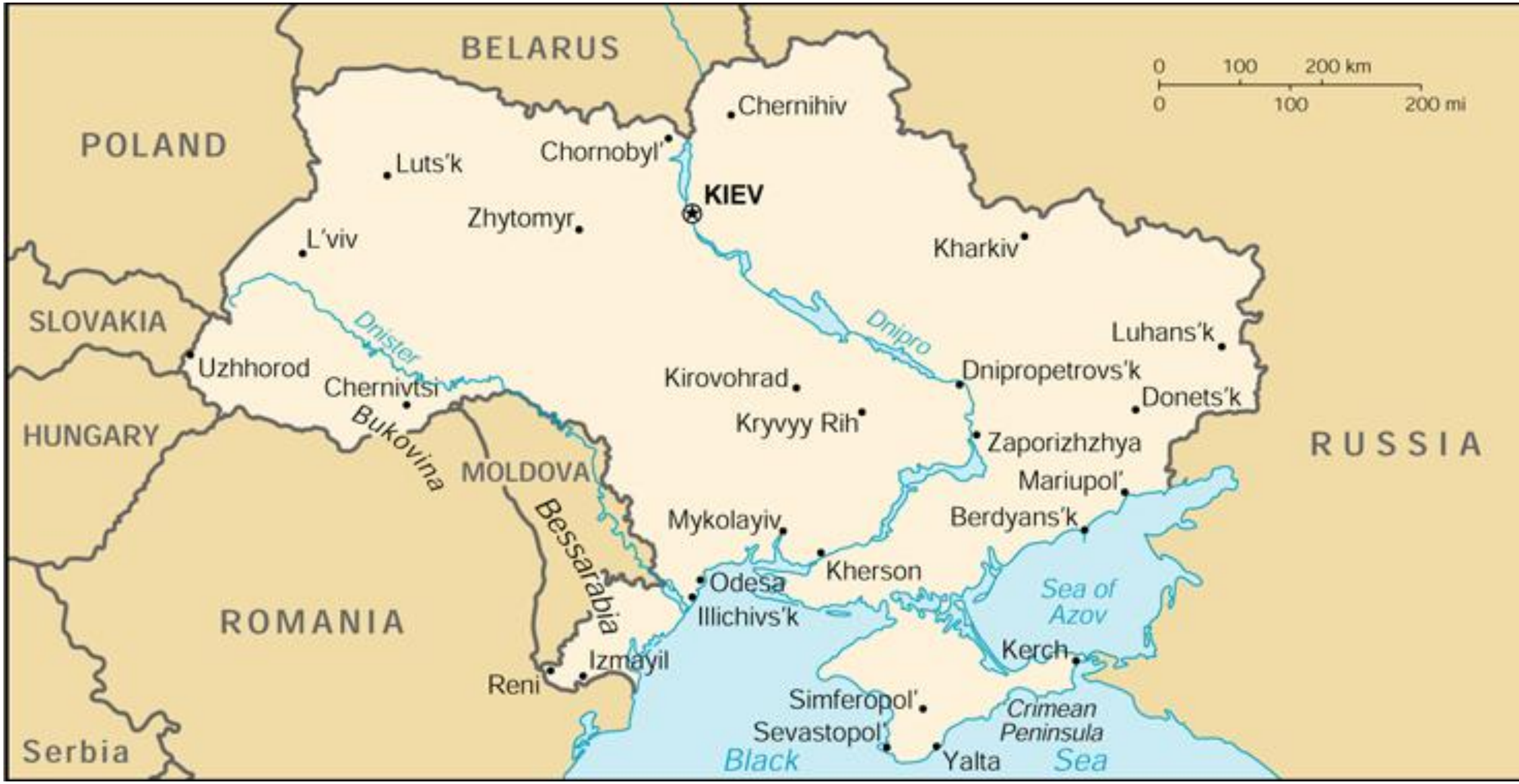
Mass privatization initiated by Chubais in 1993. Achieved end of 1994.
Strong communist opposition to reforms (especially in “red belt” regions.

Deteriorating economic performance.
August 1998 crisis. Sharp devaluation of Ruble, financial crisis.

Improvement of macroeconomic situation since 1999 with oil price increase, devaluation and Putin presidency (2000)



Ukraine (49 million):



Belonged to Russia for several centuries (Kiev capital of Rus')

Transition never really started in the Ukraine.
Kravchuk: nationalist communist president.

Liberalization only late 1994 with Kuchma presidency.
Slow start of privatization only in 1995.

Reforms stalled in 1998 with communist victory in elections.

Gradualism vs. Shock Therapy

Reform Strategies under Uncertainty

Key Questions

- Under what conditions is it possible to effectively implemennt economic reforms?
- Why were energy privatizations in Russia reversed in the 2000s?
- Why was economic transition in Poland and the Czech Republic in the 1990s successful?

Outline

I. Literature
II. Introduction
III. Individual Uncertainty
IV. Big-Bang vs. Gradualism I
V. Aggregate Uncertainty
VI. Big-Bang vs. Gradualism II
VII. Conclusions

Literature

- The political economy of reforms integrates the political process in economic analysis (Persson und Tabellini, 2000; Drazen, 2000).

- Importance of **political constraints** in the transition context (Roland, 2000).

- **Privatization plans** and the bypassing of **political constraints** (Boycko, Shleifer und Vishny, 1995; Shleifer and Treisman, 2000).

Introduction

- Difference between **ex-ante** and **ex-post** political constraints (Roland, 1994): **before** and **after** the implementation of reform package.

- They are identical, if there are no uncertainty (probabilistic) and **reversal costs**.

- A reform package can be implemented, when it is supported by a majority.

- A majority can benefit from a reform **ex-post**, but fight it **ex-ante.**

Individual Uncertainty

- The general distribution of winners and losers is known **ex-ante** (no aggregate uncertainty).
- The identity of winners and losers is unknown (individual uncertainty).
- Roland, 2000; Fernandez and Rodrik, 1991.

Individual uncertainty

p - probability of being a reform winner ex-ante and proportion of winners ex-post

$1-p$ - probability of being a reform loser ex-ante and proportion of losers ex-post

$g > 0$ - reform gain

$d < 0$ - reform loss

Under risk neutrality:

$pg + (1-p)d < 0$ (Ex-ante payoff) and $p > \frac{1}{2}$

A majority wins **ex-post**, but the reform is never implemented **ex-ante**!

Individual Uncertainty

- Reform is implemented **ex-ante** and **ex-post** (CEE):

$$pg + (1-p)d > 0 \text{ and } p > \frac{1}{2}$$

- Reform is rejected **ex-ante** and **ex-post** (Belarus, Central Asia):

$$pg + (1-p)d < 0 \text{ and } p < \frac{1}{2}$$

- Reform is rejected **ex-ante**, but implemented **ex-post**. Reform is never implemented (Medvedev and Putin):

$$pg + (1-p)d < 0 \text{ and } p > \frac{1}{2}$$

- Reform is implemented **ex-ante**, but it is rejected **ex-post.** Because of reversal costs R>0 it is never implemented (Yeltsin):

$$pg + (1-p)d > 0 \text{ and } p < \frac{1}{2}$$

Big-Bang vs. Gradualism I

- Reform package with two partial reforms:

Payoff	g_1+g_2	g_1+l_2	l_1+g_2	l_1+l_2
Proportion of winners	$p_1 p_2$	$p_1(1-p_2)$	$(1-p_1)p_2$	$(1-p_1)(1-p_2)$

WLOG: $g_1+l_2>g_2+l_1$

- **Big-Bang:** Both partial reforms are implemented at the same time.

- **Gradualism:** Sequencing of partial reforms.

Big-Bang vs. Gradualism I

The Big-Bang payoff:

$p_1 < \frac{1}{2}$ and $p_1 + (1 - p_1)p_2 > \frac{1}{2}$, so that the median voter gets $l_1 + g_2$.

If $l_1 + g_2 > -R$, none of the partial reforms is reversed.

Both reforms are implemented: $p_1 g_1 + (1 - p_1) l_1 + p_2 g_2 + (1 - p_2) l_2 > 0$.

Big-Bang vs. Gradualism I

The gradualism payoff:

$g_1 - \gamma < -R_1,$ because the expected outcome of the first partial reform

is reduced by γ (complementarity), so that the status quo is always preferred to a partial reform.

When both partial reforms cannot be reversed, the gradualism payoff is:

$(1-\delta)[p_1 g_1 + (1-p_1)l_1 - \gamma] + \delta[p_1 g_1 + (1-p_1)l_1 + p_2 g_2 + (1-p_2)l_2]$

δ – discount rate

Interim suffering: $p_1 g_1 + (1-p_1)l_1 - \gamma < 0$

Reversal: $l_1 + p_2 g_2 + (1-p_2)l_2 < -R_1$, if $p_1(g_1 - l_1) > R_1$.

Big-Bang vs. Gradualism I

- Gradualism without interim reversal has the same payoff as Big-Bang, if $\delta \to 1$.

- Gradualism with interim reversal or reversal after two reforms leads to status quo => Big Bang strictly dominates, if BB>0.

- Under individual uncertainty: 1. Big-Bang strictly dominates Gradualism or 2. both reform strategies have the same payoff.

- No status-quo bias in Big-Bang.

Aggregate Uncertainty

- The mechanics of the transition process and the economic agents involved are unknown (Dewatripont and Roland, 1995, 1997).
- Process of large-scale institutional change involved a lot of coordination among economic agents.
- Multiplicity of equilibria and limited predictive capacity on the selected outcome.
- Reform complementarities: 1. payoff from partial reform signals the payoff from full reform and 2. it is always more negative than its reversal cost.

Big-Bang vs. Gradualism II

- The Big-Bang payoff:

$$BB = (1-\delta)\underset{j,k}{E}\, F(O_{1j}, O_{2k}) + \delta \underset{j,k}{E} \max\left\{-\xi, F(O_{1j}, O_{2k})\right\}$$

- The continuation payoff for reform 2:

$$R_2(S_{1n}) = (1-\delta)\underset{j,k}{E}\left[F(O_{1j}, O_{2k}) | S_{1n}\right] + \delta \underset{j,k}{E} \max\left\{-\xi, F(O_{1j}, O_{2k}) | S_{1n}\right\}$$

- The gradualism payoff:

$$GR_{12} = (1-\delta)\underset{j}{E}\, P(O_{1j}) + \delta \Pr ob(n < \bar{n})(-\xi_1) + \delta \Pr ob(n \geq \bar{n}) \underset{n \geq \bar{n}}{E}\left[R_2(S_{1n})\right]$$

Big-Bang vs. Gradualism II

We rewrite the Big-Bang payoff:

$$BB = \Pr ob(n < \bar{n}) \underset{n<\bar{n}}{E}\left[R_2(S_{1n})\right] + \Pr ob(n \geq \bar{n}) \underset{n\geq\bar{n}}{E}\left[R_2(S_{1n})\right] \Rightarrow$$

$$GR_{12} = (1-\delta)\underset{j}{E}\, P(O_{1j}) - \delta BB + \delta \Pr ob(n < \bar{n})\left\{-\xi_1 - \underset{n<\bar{n}}{E}\left[R_2(S_{1n})\right]\right\}$$

$(1-\delta)\underset{j}{E}\, P(O_{1j}) < 0$: interim suffering due to complementarities between reforms

δBB : cost of delay with respect to Big-Bang

$\delta \Pr ob(n < \bar{n})\left\{-\xi - \underset{n<\bar{n}}{E}\left[R_2(S_{1n})\right]\right\}$: option value of early reversal $\Rightarrow$

$-\xi_1 > \underset{n<\bar{n}}{E}\left[R_2(S_{1n})\right] \Rightarrow$ positive if $\Pr ob(n < \bar{n}) > 0$.

Big-Bang vs. Gradualism II

Big-Bang can be optimal iff:

1. The interim suffering between two reforms is too high.
2. There is no learning from partial reform.
3. A high expected outcome of the Big-Bang package.

Big-Bang vs. Gradualism II

Gradualism can be optimal iff:

1. The cost of delay is low.
2. There is a high option value of early reversal.
3. Interim suffering is not too high.

Big-Bang vs. Gradualism II

- Gradualism reinforces *ex-ante* acceptability over *ex-post* irreversibility, which is usually the case for shock therapy.

- Partial reform complementarities may ease the interim period suffering and thus eliminate both the interim and the final status quo bias.

- Russia-China comparison.

Big-Bang vs. Gradualism II

- Rapid industrialization, urban development, the creation of a nascent middle class, and credit cooperatives for the peasants can be treated as complementary elements of Witte's reform package.

- Reforms proposed by Nikolai Bunge, Witte's predecessor in the Ministry of Finance of the Russian Empire, focused on domestic market development, railroad construction and a series of protectionist measures for the Russian industry.

Conclusions

- Witte: gains of industrial workers and private entrepreneurs as sufficient so that they would compensate for the losses of the agrarian population toward military capacity and internal stability.

- The revolutions of 1905 and 1917, in the aftermath of Russian military defeats against Japan and Germany, suggest that modernization in the form of shock therapy can make the middle class and industrial workers better off with a revolution rather than with the post-reform status quo.