

From Manpower Production Machine to Flexible Provision of Educational Services: Legacy and Future of Post-Soviet Higher Education

*Isak Froumin
(National Research University
“Higher School of Economics”)*

Soviet invention – “quasi-corporate” higher education

V. Lenin: “USSR economic and social system as an one single unified factory”

HE - part of the enterprise as a manpower supply machine

- * Horizontally:
 - * Territorial distribution: all regions have nearly similar institutions
 - * Industrial distribution: HEIs are located near production facilities)
- * Vertically:
 - * HEIs are usually ruled by particular branch ministry
 - * Key functions are centralized: curricula, graduates, job placement
- * Key function in “corporation” – workforce production
 - * Research separated from teaching (industrial research institutes and Academy of Sciences)

The Types of the HE Institutions

1. Regional Economic and Social Infrastructure HEIs

- * Workforce production for regional economy
- * Several universities (usually in Moscow or St.Petersburg performed methodological leadership and staff support of other universities
- * Profiles: Polytechnic, Culture and Arts, Economy and Cooperation, Pedagogical, Agricultural, Medical

2. Industry-specific HEIs (e.g. water transport, oil industry, etc.)

- * focused on labor market of specific industry and often incorporated into the production process (completely in “zavod-vtuz” model)
- * 3 subtypes: (a) **Specialized HEI -parts of soviet-type industry clusters** (Kazan Aviation Institute, Moscow Industrial University-Plant), (b) **Central specialized HEI** (Gubkin Russian State University of Oil and Gas; Moscow Institute of Steel), (c) **Network industrial HEI** (Railway Universities, branch offices of Nuclear University)

3. Classical universities

30-s: the Struggle for Perfect Machine

Year	1929/30	1930/31	1931/32
Number of higher education institutions	152	579	701

- Establishing specialized institutions: (Moscow Animal Technicians Institute was divided into Institute of cattle, Institute of Horse Breeding, Institute of Sheep Breeding, Institute of veterinary)
- Decomposition of multi-profile universities (classical universities) (medical schools became medical universities)
- Curricula reform
 - “*otraslirovanie*” – creating narrow specializations (more than 5000) under 70 sectoral ministries
 - “*vtuzirovanie*” – creating links with the industry (corporate universities)
(David-Fox, 2012)
- Detachment of the *basic* and *industrial* research from universities (Four aviation industrial institutes were detached from Bauman technical university)

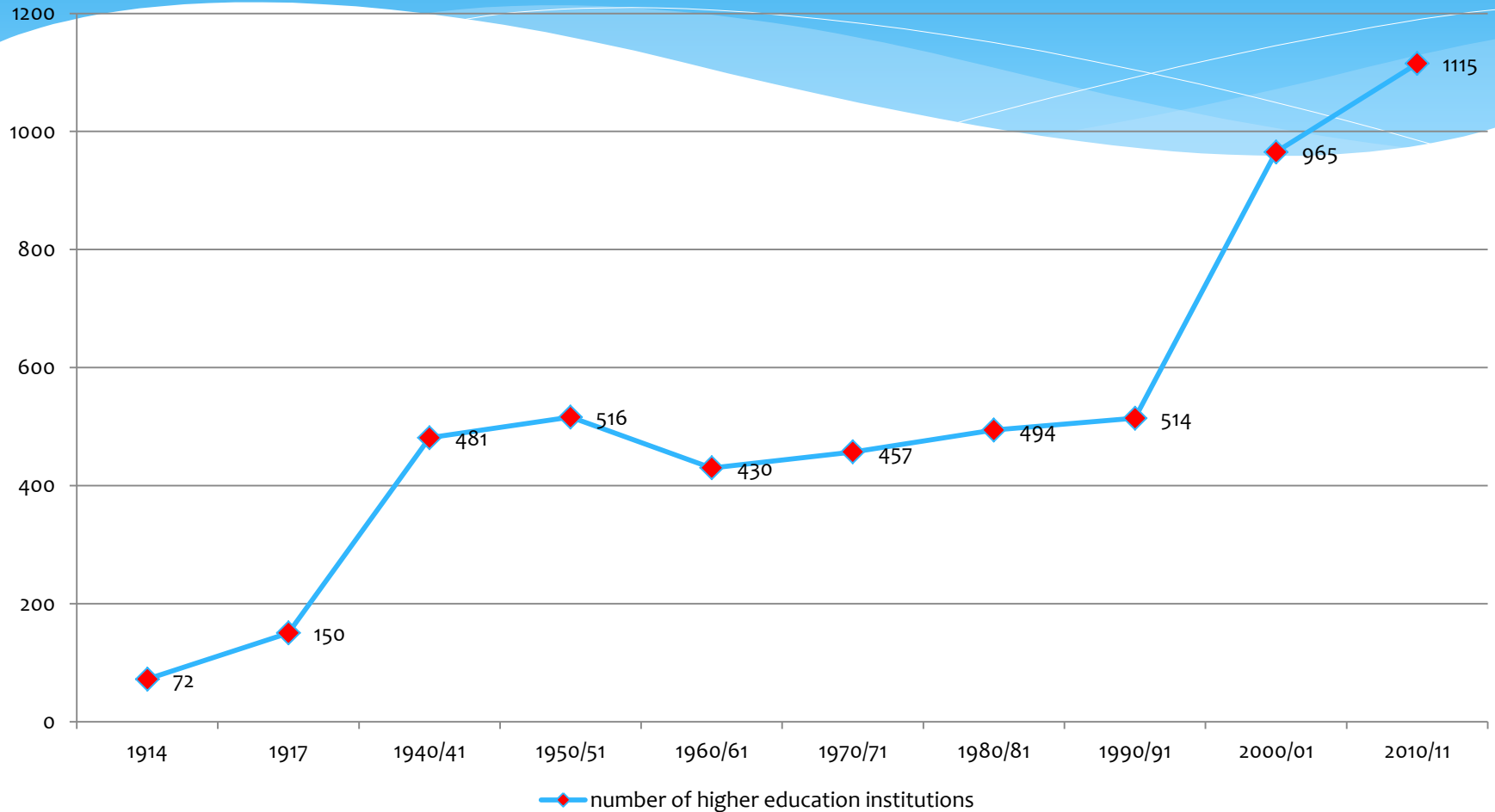
Ideal corporate university model

Specialized universities associated with a single big enterprise:

- * First year – low skilled workplace practice and basic courses
- * Second-third year – middle skilled workplace practice and specialized courses
- * Fourth year – engineering practice and specialized courses
- * Fifth year – industrial project



The structure of higher education in Russia was set up in the late 30's



50s: post-war tuning of the Machine

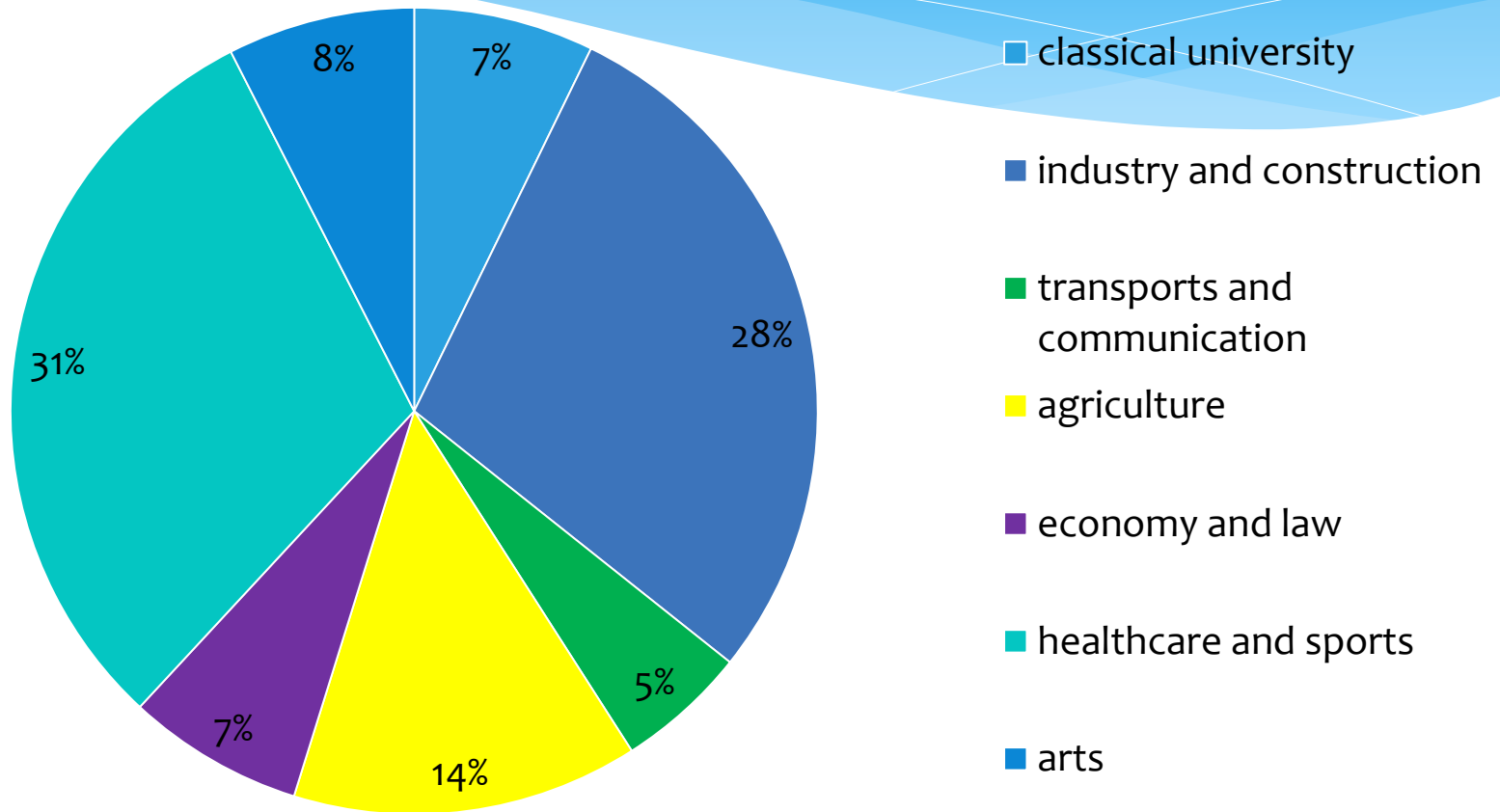
Start of the Cold war and arms race

- * - significant increase in student numbers: from 797k. to 1497k.
- * - launch of new training areas related primarily to the need of technological advance of defense industry.
- new departments and specialized universities (in Moscow, Tomsk, Novosibirsk, Taganrog) : *wireless engineering, automation, electronics, nuclear technologies, space.*

Targeted development of some regions (e.g. Siberia)

- * → relocation of a number of central universities closer to major production facilities in the late 50-s

HE Institutions by Fields (USSR, 1970)



How the Machine worked?

Complete state control model, market is completely absent

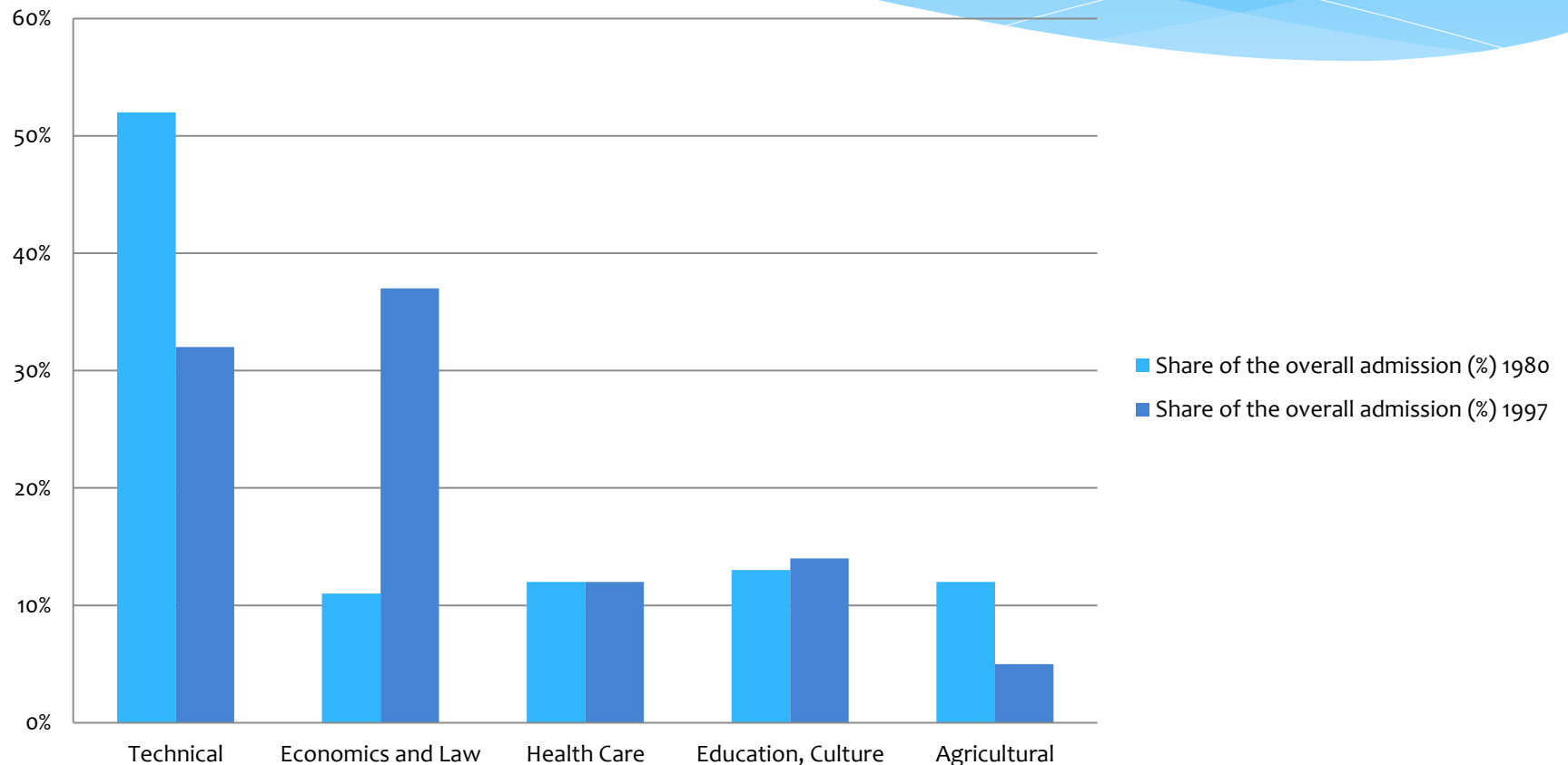
- * Restricted access (no more than 20% of school graduates go to universities)
- * Part-time evening programs only for those who work
- * Mandatory placement and regulated labor market
- * State-regulated curriculum
- * High status of the academic profession (high wages, prestige)
- * Managed interaction with the industry and Academy
- * Restricted international links

90th - Collapse of the Soviet System and New Rules

- * Several industries decline and growth of new industries – changes of labor market demand
- * Elimination of mandatory placement
- * 30% decrease of higher education funding (same number of students)
- * **New stakeholders: private business, households**
- * New rules for higher education institutions:
 - * Relative autonomy in opening new education programs
 - * Right to enroll fee-paying students into public universities
 - * Establishing private universities (rapid growth of private institutions in 90-s)

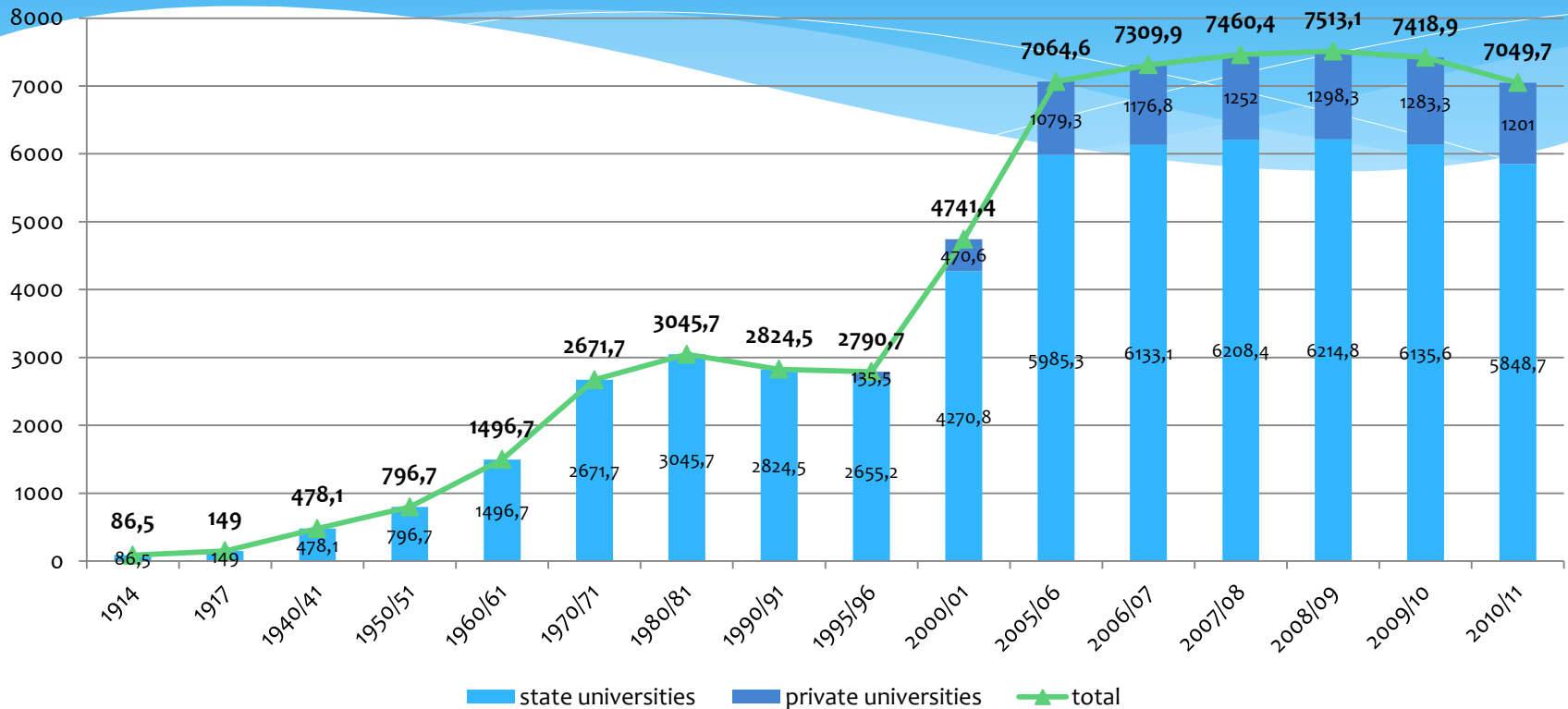
Change in Educational and Professional Preferences

Admission to HE Institutions by Speciality



Changes in higher education *increase of access*

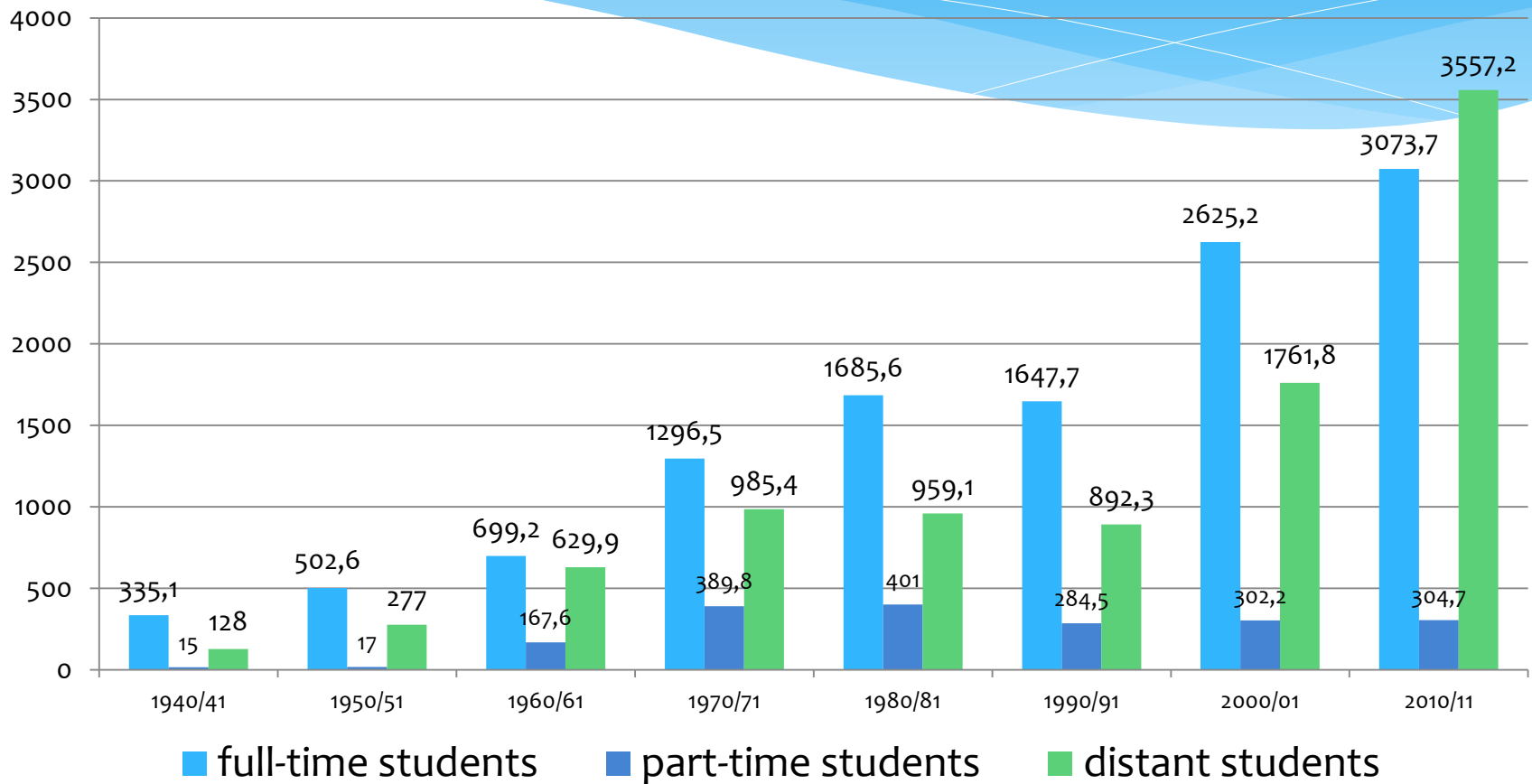
Student population in Russia



And: huge growth of universities local branches
By 2010/11: Total number of branches - 1668

Changes in higher education *growth of part-time and distant education*

Student population in Russia



What happened with the machine after 10 years?

- * Old part continues to produce manpower for
 - * non-existing and weakened industries
 - * growing industries
- * New part serves families giving competencies or selling diplomas