Implementing Health Financing Reform

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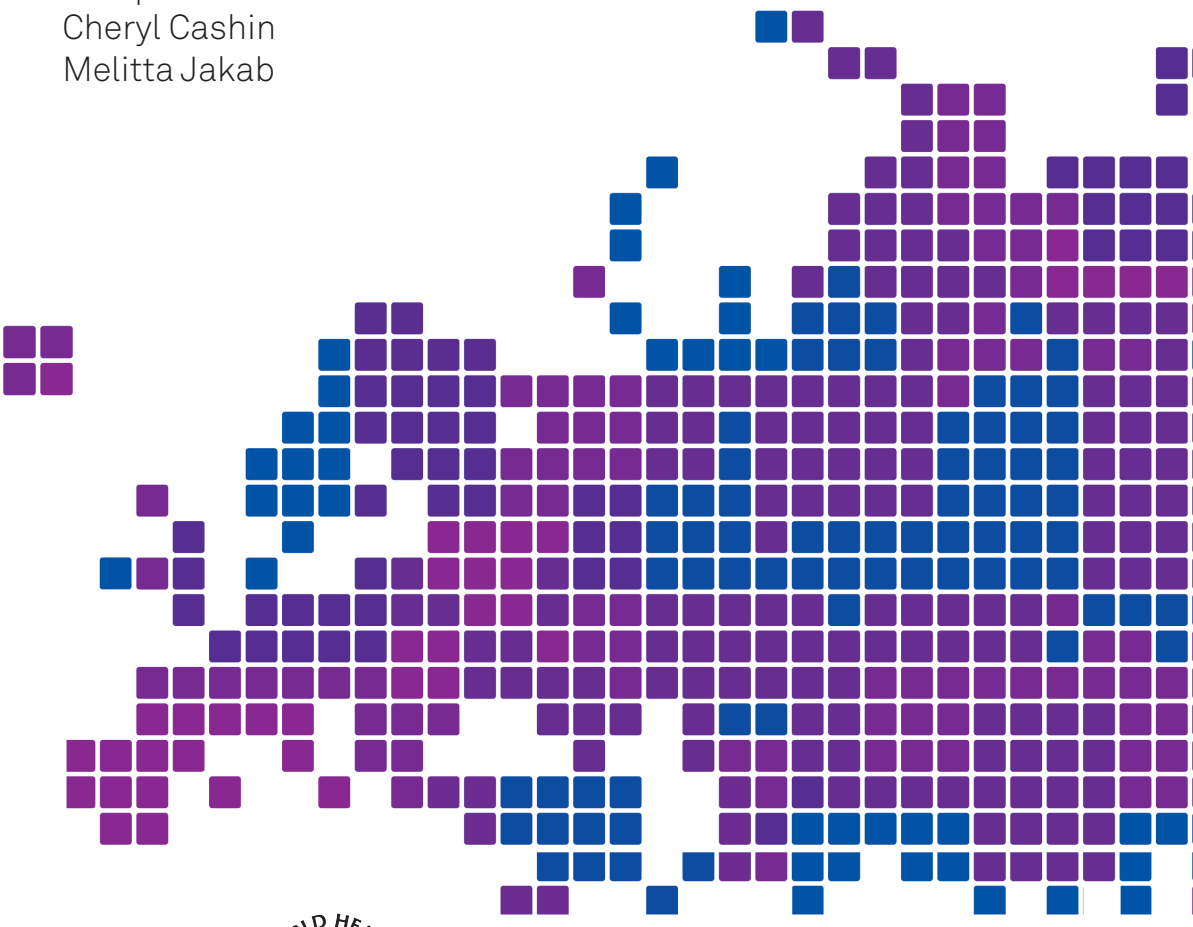
Observatory Studies Series

Lessons from countries in transition

Edited by
Joseph Kutzin
Cheryl Cashin
Melitta Jakab



WORLD HEALTH ORGANIZATION
EUROPE

European Observatory on Health Systems and Policies

Implementing Health Financing Reform

The European Observatory on Health Systems and Policies supports and promotes evidence-based health policy-making through comprehensive and rigorous analysis of health systems in Europe. It brings together a wide range of policy-makers, academics and practitioners to analyse trends in health reform, drawing on experience from across Europe to illuminate policy issues.

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Foreword

The collapse of the Berlin Wall brought with it massive economic, social and political changes for the countries that emerged from the Communist era. Health and health systems were greatly affected by these, and while the countries seemingly came from a similar starting point, differences became apparent in country contexts, policy responses and outcomes. Because changes in the economic context of most countries came very quickly and often brought severe consequences, reforms in health system financing were particularly high on the policy agenda.

The nature of the health financing reforms implemented in the so-called *transitional* countries were closely linked to the underlying changes occurring in these societies. In many cases, this gave a strong ideological flavour to the reform process, as it was viewed as part of a wider shift towards a more liberal economic environment. Frequently, however, many aspects of the pre-transition system remained highly resistant to change, and the specific mix of reform instruments and key contextual factors varied substantially across countries. By the late 1990s, most countries were not satisfied with the progress made on either the implementation or the effects of their reforms, despite the limited empirical evidence on which to base an objective assessment. Increasingly, countries began to undertake analytic work on their reforms, often with the support of academic institutions and international agencies. As a result, a body of evidence has emerged that allows for a comparative assessment of the health financing reforms in these countries. That is the focus of this book.

This book analyses the experience with the financing reforms implemented by the countries of central Europe, eastern Europe, the Caucasus and central Asia. The assessment criteria by which reforms are judged are derived from the conceptual framework first put forth in *The world health report 2000*, and later adapted into a political agreement of all member countries of the World Health Organization's (WHO) European Region in the Tallinn Charter on Health Systems, Health and Wealth, signed in June 2008. The book does not, however, rely on cross-country comparison of a common set of performance indicators.

Instead, in-depth analyses of particular reform experiences demonstrate how some countries have made progress on key objectives, while others have lagged.

Interestingly, the findings do not yield strong conclusions about specific reform instruments, such as single- versus multiple-payer health insurance arrangements, particular provider payment methods, or co-payment regimes. Instead, the lessons that emerge from the evidence focus more on reform processes, sequencing and coordination of actions. Of critical importance was the identification of both fragmentation and inappropriate incentives as priority problems to be addressed; and then the development, implementation and monitoring of reform strategies to reduce fragmentation and align policy instruments to create appropriate incentives for more efficient and equitable systems. The specific combination of instruments used to address these concerns successfully were not the same from country to country, because underlying (especially economic) contextual factors diverged substantially in the post-transition period. Hence, there is no "one-size-fits-all" reform strategy. Nevertheless, countries that have made greater progress in their performance have been those that implemented consistent and comprehensive implementation processes tightly focused on reducing fragmentation and aligning incentives in an explicit attempt to promote greater efficiency in the health service delivery system, equity in the distribution of resources and services, financial protection and transparency.

This book is somewhat different from others in the Observatory's series in that most of the authors are – as their primary vocation – actively engaged with health reform processes in the countries concerned, rather than from an academic base. This befits the focus of this book on deriving lessons from *implementation*. The participation of a large number of WHO and World Bank staff and consultants as chapter authors also reflects the very real partnership between our two agencies in country support for health system reform. As with all other volumes in the Observatory series, of course, the book does not attempt to tell policy-makers what to do, and also warns against any belief in "magic bullet" reforms. The evidence suggests strongly that "the devil is in the details", and the comprehensive analysis contained in this book helps decision-makers – and their advisors – to understand these details and the lessons learned from how countries have coordinated (or not) the various instruments of health financing policy. On behalf of all the Partners of the Observatory, therefore, I am pleased to introduce this volume. I am confident it will contribute to better policy-making, not only in the transitional countries but also in the other countries of this region and in other parts of the world.

Nata Menabde
Former Deputy Regional Director, WHO Regional Office for Europe
Copenhagen, 14 August 2009

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We appreciate the efforts of the Observatory and Josep Figueras in particular for the original idea to write this book, and the contribution made by Reinhard Busse and Jonas Schreyögg for its original conception.

We also wish to thank the Semmelweis University's Health Services Management Training Center, which generously hosted a very productive authors' workshop to discuss first chapter drafts. Particular thanks go to Peter Gaál and Tamas Evetovits for the leadership and support provided for the workshop.

Thanks are also due to the staff at the WHO Barcelona Office for Health Systems Strengthening. The Office promotes better performing health systems through the diagnosis and development of health system policies, particularly health financing policy, in the countries of the WHO European Region. It also supports capacity building and institutional development for health financing and policy analysis at the national and regional levels.

Finally, we are most grateful to all our authors for responding promptly in both producing and amending their chapters, and for their patience throughout the process. In addition, many authors also contributed greatly as reviewers of chapters other than the ones with which they were directly involved, and we believe that this enhanced greatly the quality of the final product.

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List of abbreviations

ALOS	Average length of (hospital) stay
ARH	Regional hospital agencies (France)
ARV	Anti-retroviral
BOOT	Build Own Operate Transfer model
CAM	Complementary and alternative medicine
CCS	Clinical Center of Serbia
CDC	Centers for Disease Control and Prevention
CE	Central Europe
CE/EECCA	Central Europe, eastern Europe, the Caucasus and central Asia
CHIP	Consolidated Health Investment Program (Latvia)
CMEA	Council of Mutual Economic Assistance
CPI	Consumer price index
CSF	Central Sickness Fund (Estonia)
CSR-CIHC	Center for Social Research (Moscow) and Center for International Health Care of Boston University
CZK	Czech koruna (crown)
DHIF	District Health Insurance Fund (Romania)
DOT	Directly observed treatment
DRG	Diagnosis-related group
EBRD	European Bank for Reconstruction and Development
EHIF	Estonian Health Insurance Fund
ESCo	Energy services company
EU	European Union
EU12	Member States that acceded to the EU between 1990 and 2006
EU15	Countries belonging to the EU in May 2004
FAP	Rural physician assistant and midwife post
FBiH	Federation of Bosnia and Herzegovina (within Bosnia and Herzegovina)
FGP	Family Group Practice
FSF	Federal Solidarity Fund (Bosnia and Herzegovina)
GDP	Gross domestic product
GDR	German Democratic Republic
GFATM	Global Fund to Fight AIDS, TB and Malaria
GP	General practitioner
HBS	Household Budget Survey

HCSO	Hungarian Central Statistical Office
HeSPA	Health and Social Programs Agency (Georgia)
HIF	Health Insurance Fund
HII	Health Insurance Institute (Albania)
HIIS	Health Insurance Institute of Slovenia
HIV/AIDS	Human immunodeficiency virus/acquired immunodeficiency syndrome
HUF	Hungarian forint
HZZO	Health Insurance Fund (Croatia)
IAIS	International Association of Insurance Supervisors
IDU	Intravenous drug user
IFC	International Finance Corporation
IMCI	Integrated Management Childhood Illness programme
IMF	International Monetary Fund
IVF	In vitro fertilization
KGS	Kyrgyz som
KIHS	Kyrgyz Integrated Household Survey
KM	Bosnia and Herzegovina convertable marka
LOO	Lease Own Operate model
LSE	London School of Economics
MDR	Multidrug-resistant
XDR	Extensively drug-resistant
MHIF	Mandatory Health Insurance Fund (Kazakhstan and Kyrgyzstan)
MoH	Ministry of Health
MoSA	Ministry of Social Affairs (Estonia)
MTBF	Medium-Term Budget Framework
MTEF	Medium-Term Expenditure Framework
NEM	New Economic Mechanism
NFC	National Framework Contract
NGO	Nongovernmental organization
NHA	National Health Accounts
NHF	National Health Fund (Poland)
NHIC	National Health Insurance Company (Republic of Moldova)
NHIF	National Health Insurance Fund
NHS	National Health Service
NIHD	National Institute of Health Development (Estonia)
NOBUS	National Sample Survey of Household Welfare and Participation in Social Services (Russian Federation)
NSSI	National Social Security Institute (Bulgaria)
O&M	Operate and Maintain model
OECD	Organisation for Economic Co-operation and Development
OEP	National Health Insurance Fund Administration (Hungary)
OOPS	Out-of-pocket (payments)
PEM/PFM	Public Sector Expenditure and Financial Management
PHC	Primary health care

PLN	Polish zloty
PPP	Purchasing power parity
PRSP	Poverty Reduction Strategy Paper
R&D	Research and development
RLMS	Russian Longitudinal Monitoring Survey
RS	Republic Srpska (within Bosnia and Herzegovina)
SCHIA	State Compulsory Health Insurance Agency (Latvia)
SES	Sanitary-Epidemiological Services
SF	Social Fund
SGBP	State-Guaranteed Benefits Package
SHA	State Health Agency (Armenia)
SIZ	Communal Insurance Association (Yugoslavia)
SMIC	State Medical Insurance Corporation (Georgia)
SPF	State Patient Fund (Lithuania)
STI	Sexually transmitted infection
SUB	Rural hospital
SUSIF	State Unified Social Insurance Fund (Georgia)
SWAp	Sector-Wide Approach
TB	Tuberculosis
TDMHIFs	Territorial departments of the MHIF Kyrgyzstan
TEH	Total expenditure on health
TFCHIs	Fund of Territorial (Russian Federation) Compulsory Health Insurance
TPF	Territorial Patient Fund (Lithuania)
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UNIC	A state-owned insurance enterprise in Uzbekistan
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
USSR	Union of Soviet Socialist Republics
VAT	Value-added tax
VHI	Voluntary health insurance
VZP	General Health Insurance Company (Czech Republic)
WHO	World Health Organization

Country abbreviations (based on the ISO country codes)

AL	Albania
AM	Armenia
AZ	Azerbaijan
BA	Bosnia and Herzegovina
BG	Bulgaria
BY	Belarus
CZ	Czech Republic
EE	Estonia

GE	Georgia
HR	Croatia
HU	Hungary
KG	Kyrgyzstan
KZ	Kazakhstan
LT	Lithuania
LV	Latvia
MD	Republic of Moldova
MK	The former Yugoslav Republic of Macedonia
PL	Poland
RO	Romania
RU	Russian Federation
SI	Slovenia
SK	Slovakia
TJ	Tajikistan
UA	Ukraine
UZ	Uzbekistan
YU	Serbia and Montenegro

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Chapter 5

Reforms in the pooling of funds

Joseph Kutzin, Sergey Shishkin, Lucie Bryndová, Pia Schneider, Pavel Hroboň[49]

A. Introduction

Pooling is a common theme in health financing, as it is directly linked to one of the principal goals of health financing reform (and indeed, of health systems more generally): improving protection against the financial risk of using health care services. Experience with reforms in CE/EECCA countries suggests the need to distinguish two aspects in this regard: (1) pooling as a policy objective (that is, risk pooling), and (2) pooling as a policy instrument (that is, changes in the way that funds are accumulated in the health system). More specifically, the central position of pooling in the health financing system (Fig. 5.1) suggests that it is essential to understand the following:

- allocation mechanisms from collection
- interactions with purchasing
- relation to the population in terms of coverage and choice
- governance and regulatory arrangements for pooling agencies.

A critical issue is the *market structure* of pooling in a particular country. Dimensions of market structure concern the number of pools relative to the size of the population, whether pools are territorially distinct or overlap, whether there is competition between pools, as well as the nature of any mechanisms for inter-pool financial flows (for example, risk-adjusted allocations). More specifically, the nature and extent of fragmentation in pooling has implications for policy objectives.

In this chapter we describe and analyse how reforms in the way that CE/EECCA countries pool funds for health care have been implemented and

49 The authors are grateful to Sheila O'Dougherty and Jack Langenbrunner for providing helpful comments on earlier drafts.

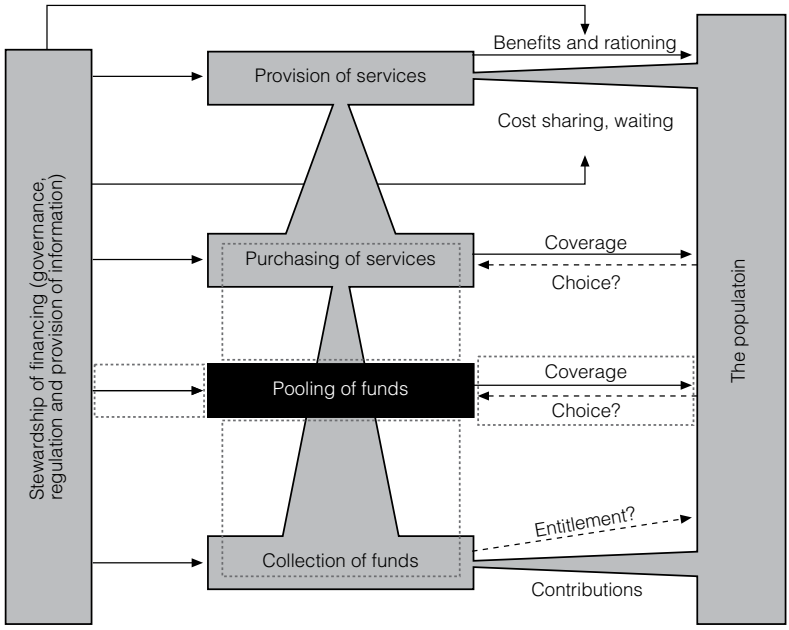

Fig. 5.1 *Pooling and key interactions in the health financing system*

Source: Adapted from Kutzin 2001.

the effects that these changes have had on health financing policy objectives via their impact on pool fragmentation. The principal objectives related to pooling are financial protection, equity in utilization and the distribution of health resources, as well as administrative efficiency. Effects on or associations with changes in efficiency in the organization of health care services are also considered here, although these are addressed in more depth in Chapter 6. The next section of this chapter provides a brief descriptive overview of reforms relating to pooling in CE/EECCA countries. This is followed by an in-depth analysis of the implementation and effects of reforms in several countries. We draw lessons from this implementation experience in our concluding section (D).

B. Overview of pooling reforms in CE/EECCA countries

Since 1990, most CE/EECCA countries have introduced reforms relating to how they pool funds for health care. Such reforms have involved both compulsory and voluntary pooling arrangements. Reforms in voluntary pooling (the introduction or expansion of VHI) are addressed in Chapter 11. Therefore, we limit the scope of this chapter to reforms in compulsory pooling.

Reforms to alter the market structure of compulsory pooling arrangements have been implemented in nearly all transitional countries. Because each case

has its own peculiarities, the reforms are difficult to categorize. For the purposes of this chapter, we identify two broad types of pool market structure reform: (1) creating a new pooling agency (or agencies), such as a compulsory health insurance fund(s); and (2) either centralizing formerly decentralized pools or introducing risk-adjusted competition between pools. An overview of such reforms in the region can be found in Table 5.1.

As reflected in the table, nearly every CE/EECCA country has introduced a reform of pooling arrangements since 1990. In every CE country and the new EU Member States shown in the table, reforms included the introduction of a compulsory health insurance fund (or funds) organized separate (though to varying degrees) from direct hierarchical control of the public sector budgetary and financial management system. However, the establishment of new pooling agencies was not always synonymous with the creation of contributory compulsory social health insurance. For example, the Armenian State Health Agency (SHA) and Latvian State Compulsory Health Insurance Agency (despite its name) manage general budget revenues only, and there is no link between contribution and entitlement. Similarly, while Georgia retains its payroll tax, there is no longer a percentage that is earmarked for health, and no link between contribution and entitlement. In most other cases, however, new agencies were introduced in the context of a shift from population- to contribution-based entitlement (that is, "true" social health insurance).

In the former Soviet countries that are not part of the EU, the reform picture is more mixed. While most of these 12 countries passed legislation in the early 1990s to establish compulsory health insurance, only five of them actually did so. The Russian Federation was first in 1993, followed by Georgia, Kazakhstan (though it only survived three years), Kyrgyzstan and the Republic of Moldova. Armenia also created a public agency, initially separate from the MoH, to pool all budget funds for health at national level. Minor changes in resource allocation mechanisms to territorial pools were introduced in Belarus and Ukraine, and a more significant change (*oblast*-level pooling) is under way in Uzbekistan.

To varying degrees in all countries, a critical aspect of pooling reforms has been the extent and nature of efforts to coordinate the pooling of general budget revenues with those collected from earmarked payroll taxes for health insurance. Related issues have included the extent and nature of "horizontal" fragmentation in pooling arrangements (such as single or multiple/decentralized funds, separate arrangements for insured and uninsured populations, and so on) and the "vertical" integration/separation of pooling arrangements with collection, purchasing and provision. Insurance fund competition has been discussed in many countries but only introduced in the Czech and Slovak Republics and the Russian Federation.

Table 5.1 *Reforms to compulsory pooling arrangements*

EU	
Bulgaria (NHIF 2007; Waters et al. 2006)	NHIF established as an independent public entity in 1999 under tripartite governance arrangement (employers, state, insured individuals); universal entitlement based on citizenship; outpatient care and part of inpatient costs covered through national pool with 28 regional branches. The MoH initially retained national pool (direct budgeting) for specialized facilities, university and regional hospitals, but NHIF has gradually increased its role in pooling for inpatient care as well. Municipal health budgets were centralized within the MoH in 2004, and for two years both the Ministry and the NHIF contracted inpatient care in a dual system. The 2006 reform expanded the responsibility of the NHIF to become single national pool of funds for hospital care.
Czech Republic (Hroboň 2003, 2004)	Compulsory health insurance was introduced in 1992, although unlike typical social health insurance, the right to entitlement was (and continues to be) based on permanent residence, not contribution. The insurance was initially managed by a single insurer (the General Health Insurance Company, VZP), but soon after competing non-profit insurers – with a legal status of independent public entities – were introduced. Each insurer collects premiums (set as a payroll tax) independently. In 1994, a national pooling arrangement was introduced through a simple risk-adjustment mechanism administered by the VZP. Approximately 70% of collected funds (60% of collected premiums and the whole payment from the state budget on behalf of non-working people) were subject to redistribution between insurers. The total number of insurers rose to 27 in 1995 and stabilized at 9 in 2000. From 2004 to mid-2006, a new risk-adjustment process was gradually implemented, with all collected funds subject to redistribution (for example, in one national pool), that combines a more refined ex ante formula and an ex post partial compensation of expensive cases.
Estonia (Jesse et al. 2004; Couffinhal and Habicht 2005)	Health insurance laws of 1991 and 1994 established one Central Sickness Fund and (initially 22 but, by 1994, 17) non-competing sickness funds organized at county/municipal level and accountable to this level of administration. In 2001, a law established the EHIF to replace the Central Sickness Fund and consolidate the regional sickness funds into 7 (and later 4) regional departments of the EHIF. The EHIF was given legal status as an independent public entity governed by a tripartite Supervisory Board. It manages the national compulsory insurance system (94% population coverage in 2003). A total of 2% of the pool is retained centrally for rare and expensive procedures. Allocation to regional branches is carried out by crude capitation for all services other than those provided by GPs (and the latter reflects GP payment methods).
Hungary (Gaál 2004)	A single national compulsory insurance pool was established in 1989, although entitlement is effectively based on residence rather than contribution. In 1992 the OEP was established as a single national pool. Reforms have focused principally on governance arrangements for the OEP. Initially, there was self-governance status with supervision by elected employer and employee representatives. This was abolished in 1998, and control of the OEP was vested in the Prime Minister's Office and then transferred to the Ministry of Finance in 1999 and to the MoH in 2001.

Table 5.1 *contd*

EU *contd*	
Latvia (Tragakes et al. 2008)	In 1994, the SSF was established with a decentralized structure of 35 "local account funds" that managed separate pools. These were consolidated to 8 sickness funds in 1997, which received age-adjusted capitation payments from the SSF. In 1998, the SSF was changed to the SCHIA. As before, however, the system provides universal, population-based entitlement that is not linked to contribution and is funded from general budget revenue (initially an earmarked percentage of personal income tax revenue). The system changed again in 2004, with the 8 sickness funds converted to 5 territorial branches of the SCHIA.
Lithuania (SPF 2007)	The SPF was introduced in 1992 as a single national fund under the MoH. The 1996 Law on Health Insurance put the SPF under government rule and established 10 TPFs as branches of the SPF organized at county level. In 2003, the SPF again became subordinate to the MoH, and the number of TPFs was reduced to 5.
Poland (Kuszewski and Gericke 2005)	In 1999, 16 regional sickness funds and 1 military/police fund were established. A 2003 law centralized pooling under a single National Health Fund.
Romania (Bara, van den Heuvel and Maarse 2002; authors' own compilation)	Compulsory health insurance was introduced in 1998, following a law passed in 1997 to shift from the budget-funded system inherited from the pre-transition period. The 1997 law required the 42 DHIFs to collect payroll contributions locally and then contract for services from public and private providers. The district funds administer the money, along with an NHIF, which sets the rules and can reallocate up to 25% of the collected funds to under-financed districts. This was found to be insufficient, and in 2004 pooling was centralized from district to national level. Remaining concerns include the lack of a clearly defined benefits package and gaps in the coverage of population groups (long-term unemployed, informal sector and rural workers, for example), leading to additional reforms in 2006, focusing on defining a reduced benefits package.
Slovenia (Albreht et al. 2002)	The 1992 Healthcare and Health Insurance Acts created the HIIS as a compulsory insurance fund and introduced co-payments for most health benefits. Insurance companies offered complementary coverage to cover the co-payments charged by social health insurance, and within a few years, approximately 96% of the population had complementary insurance.
Slovakia (authors' own compilation)	A compulsory health insurance system was introduced in 1992, administered initially by a single insurer. Soon after, competing non-profit insurers were allowed. Each insurer collects premiums (set as a payroll tax) independently. The number of insurers increased to 12 and later stabilized at 5. A 2004 reform transformed insurers (formerly public institutions) into joint stock companies, with some owned by the government and others by private entities. All are subject to the same rules (including bankruptcy) and oversight by a specialized regulator. The percentage of premiums subject to redistribution changed several times, ranging from approximately 70% to 100%. The 2004 reform left responsibility for the collection of premiums with the insurers but transferred pooling to the hands of the regulator. At the time of writing, approximately 90% of collected funds are redistributed, although this redistribution is based on prescribed (100% of what the insurers

Table 5.1 *contd*

EU *contd*	
Slovakia (*contd*)	should have collected according to the estimated earnings of the covered population), not collected premiums, thus also creating competition between insurers in terms of premium collection. The redistribution formula is based on age and sex, with no ex post compensation for expensive cases.
Non-EU CE countries	
Albania (Nuri and Tragakes 2002)	The HII was established in 1995 as an autonomous social health insurance fund. Its service coverage responsibilities are limited to only PHC physician services and some outpatient pharmaceuticals. In 2000, budget-funded pools in the Tirana Region were restructured, integrating finance and delivery.
Bosnia and Herzegovina (World Bank 2006a)	Decentralized pooling exists in 13 compulsory insurance funds: 1 in RS, 12 in FBiH organized at cantonal and district (Brcko) levels, as well as the FSF. The FSF was established in 2002 and functions as an entity-level pool in the FBiH for "high-cost" diseases, expensive pharmaceuticals and immunization.
Croatia (World Bank 2004)	Croatia's Health Insurance Institute (HZZO) was established by law in 1993, managing a single national pool. The 2002 Health Insurance Law reduced benefits and increased co-payments, as well as establishing complementary voluntary health insurance to cover these.
TFYR Macedonia (Gjorgjev et al. 2006)	The compulsory HIF established in 1991 by the Law on Health Care as an agency within the MoH with a director appointed by the government. A 2000 law transformed the fund into an independent public agency managed by a Board, with representatives of the HIF, the MoH, the Ministry of Finance, and service users. The HIF has 30 branch offices established at municipal level.
Serbia and Montenegro (World Bank 2005)	Beginning in 1992, the Federal Republic of Yugoslavia adopted Health Care Acts in the Montenegrin and Serbian Republics, centralizing social insurance pooling at the republic level from the previous community SIZs (see Chapter 2), and establishing republic-level HIFs to contract with local providers. The HIFs are separate entities from the MoH, with branch offices at municipality level in charge of member services.[50]
Russian Federation and western-most former Soviet Republics	
Belarus (authors' own compilation)	Some changes away from the inherited system have taken place, to allow territorial pools, but these have been minor.
The Republic of Moldova (Shishkin, Kacevicius and Ciocanu 2008)	Compulsory health insurance was introduced in 2004, managed by the NHIC as a single national pool funded two thirds from central budget transfers and one third from payroll tax. Concurrently, the former role of *rayons*/cities in pooling health budgets was eliminated.
Russian Federation (Shishkin 1999; Mathivet 2007)	CHIs were established at federal and territorial levels in 1993, but with substantial variation in how the system was implemented across the country. Three broad models can be discerned: (1) regions that rely exclusively on redistribution from a TFCHI to competing private insurers; (2) direct allocation from the TFCHI to providers or

50 This describes the situation prior to the separation into separate countries of Serbia and of Montenegro.

Table 5.1 *contd*

Russian Federation and western-most former Soviet Republics *contd*	
Russian Federation (*contd*)	to its decentralized administrative branches organized in specific subregions of the territory; and (3) a mixed system of private insurers and affiliates. The result was a degree of centralization of formerly decentralized budget-funded pools, but because both regional and local governments continue to budget "their" health facilities directly, these now overlap with the CHI pools. Inter-regional risk adjustment takes place, carried out by the Federal CHI to the TFCHI, along with intra-regional risk adjustment to private insurers by the TFCHI.
Ukraine (Lekhan, Rudiy and Shishkin 2007)	An inherited structure of administratively decentralized and territorially overlapping budget-funded pools remains, but in 2001 a change to intergovernmental financial arrangements changed the basis for health allocations to regions from old input norms to age- and sex-adjusted capitation.
Caucasus and central Asia	
Armenia (World Bank 2006b)	In 1997, the SHA was created as a semi-independent structure outside the MoH, managing a national pool of budget funds linked to the Basic Benefits Package mandated by the state. In 2002, the SHA was incorporated as a department of the MoH.
Azerbaijan (authors' own compilation)	No changes have been introduced, apart from some limited district-level pooling experiments implemented in the context of donor projects. In early 2008, the government approved a decree to introduce compulsory health insurance under a new State Agency for Mandatory Health Insurance.
Georgia (authors' own compilation)	Compulsory health insurance was introduced in 1995 (SMIC, and later SUSIF), although without a link between entitlement and contribution. There have since been many changes in coverage entitlements and organizational arrangements. Local budget revenues for health services were gradually centralized into the SMIC/SUSIF pool. Although payroll tax was cancelled in 2005, local and national budget funds are still pooled within SUSIF, which has become a department of the MoH.
Kazakhstan (Cashin and Simidjiyski 2000; Government of Kazakhstan 2004; authors' own compilation)	Compulsory health insurance, with funds pooled at the oblast level, was introduced in 1996, but uncoordinated with the pooling (and purchasing) arrangements of the MoH, whose budget funding was also pooled at the oblast level. The MHIF was cancelled in 1998. A single pool/purchaser system was introduced in pilot sites, including Zhezkazgan, Semipalatinsk and Karaganda *oblasts*, with donor support. From 1999 to 2004, health budgets were decentralized to *rayon* level. In 2005, a legal basis was approved for budget consolidation or pooling of all health budget funds at the *oblast* level, with the *oblast* health departments serving as single payers responsible for purchasing health services. National implementation proceeded in the period 2006–2007.
Kyrgyzstan (Kutzin et al. 2002; Jakab et al. 2005; authors' own compilation)	A compulsory insurance fund (the MHIF) was introduced in 1997 as a national pool, and coordinated with local government (*oblast* and *rayon*) pools until 2000 under a "joint systems" approach. In 2001, implementation of the "Single Payer" reform began, with pooling of *rayon* and *oblast* budget revenues in *oblast* branches of the MHIF (which were already administering the nationally pooled health

Table 5.1 *contd*

Caucasus and central Asia *contd*	
Kyrgyzstan (*contd*)	insurance payroll and other revenues allocated from central to oblast level). Nationwide implementation was completed by 2005, resulting in one budget-funded pool for the entire population of each oblast and one contributory national pool for insured individuals, providing a complementary benefit; both pools were managed by the national MHIF and its *oblast* branches. In 2006, budget-funded pools were merged and centralized to national level.
Tajikistan (authors' own compilation)	No major reforms have been implemented to the inherited system, although the national health financing strategy approved by the President envisions *oblast*-level pooling with *oblast* health departments as the single pooling and purchasing entities. Pilots to pool funds for primary care at *rayon* level and to purchase services using a per capita payment system are being expanded at the time of writing.
Turkmenistan (Ensor and Thompson 1998; Ibraimova and Shishkin 2003)	No major health financing reforms have been implemented within the inherited system and budget funds remain pooled at the country administrative levels of republican, *velayet* and *etrop*. A government-run "Voluntary Health Insurance" scheme was introduced in 1996 that in the local context is difficult to distinguish from compulsory health insurance, particularly for formal-sector workers and civil servants. It provides discounts for covered services and products, including pharmaceuticals. Voluntary Health Insurance is a national system with a national pool and is uncoordinated with the pooling (and purchasing) arrangements for budget funds.
Uzbekistan (Routh 2007; World Bank 2009)	A step-by-step health reform process linking changes in health financing and service delivery is under implementation. The first phase dealt with rural PHC, first piloted and then rolled out nationally. Funds from *rayon* budgets for rural PHC are pooled at the *oblast* level with the *oblast* health departments as single pooling and purchasing entities. The second phase is concerned with urban PHC and non-tertiary hospitals, and began with budget funds for urban PHC pooled at the *oblast* level. However, a change in the hospital payment system has not yet been implemented and hospital funds remain separated by the country administrative levels of *oblast*, city and *rayon*.

Notes: NHIF: National Health Insurance Fund (Bulgaria); MoH: Ministry of Health; VZP: General Health Insurance Company (Czech Republic); EHIF: Estonian Health Insurance Fund; GP: General practitioner; OEP: National Health Insurance Fund Administration (Hungary); SSF: State Sickness Fund (Latvia); SCHIA: State Compulsory Health Insurance Agency (Latvia); SPF: State Patient Fund (Lithuania); TPF: Territorial Patient Fund (Lithuania); DHIF: District Health Insurance Fund (Romania); HIIS: Health Insurance Institute of Slovenia; HII: Health Insurance Institute (Albania); PHC: Primary health care; RS: Republika Srpska; FBiH: Federation of Bosnia and Herzegovina; FSF: Federal Solidarity Fund (Bosnia and Herzegovina); HZZO: Health Insurance Institute (Croatia); HIF: The compulsory Health Insurance Fund (TFYR Macedonia); HIF: Health Insurance Fund; SIZ: Communal Insurance Association (Serbia and Montenegro); NHIC: National Health Insurance Company (the Republic of Moldova); CHI: Compulsory Health Insurance Fund (Russian Federation); TFCHI: Territorial CHI Fund (Russian Federation); SHA: State Health Agency (Armenia); SUSIF: State United Social Insurance Fund (Georgia); SMIC: State Medical Insurance Corporation (Georgia); MHIF: Mandatory Health Insurance Fund (Kazakhstan, Kyrgyzstan).

C. Implementation of selected pooling reforms: description and analysis

In this section, we provide an in-depth description and analysis of pooling reforms in selected CE/EECCA countries that provide important lessons. The examples are organized according to the two broad categories of pool market structure reforms identified above. The analysis aims to show how the reforms were implemented (including interactions with other relevant aspects of the system, as shown in Fig. 5.1), and the effects of the reforms on health financing policy objectives, principally via their impact on pool fragmentation.

i. Addressing fragmentation through the introduction of new pooling agencies

Early health reformers in the transitional countries identified a number of gains that were expected to arise from the introduction of compulsory health insurance. These included higher funding levels, improved accountability, greater efficiency and higher quality, through new payment incentives and the separation of purchaser from provider. Underlying many of these hopes was an expectation that the introduction of compulsory insurance would be an instrument for addressing underlying efficiency and equity problems arising from the fragmented health financing system inherited from the past (see Chapter 2). Experience with the introduction of compulsory health insurance in low- and middle-income countries elsewhere in the world suggests, however, that such reforms tend to worsen inequities and duplication by setting into motion the establishment of separate, segmented health financing (and often delivery) systems for the insured and uninsured populations (Kutzin 1997; Londoño and Frenk 1997; Lloyd-Sherlock 2006; Kutzin 2007; Savedoff 2004). In a context of relatively low levels of formal employment, the usual approach of "starting insurance" with the formal sector can exacerbate existing inequalities because formal sector workers tend to earn higher incomes and hence are already relatively advantaged in terms of their ability to access health services. Rather than gradually expanding to the rest of the population (as occurred over long periods of time in Germany and Japan, for example), the initially covered group is able to use its position and influence to obtain expanded service coverage and greater public subsidies. The result has been the creation of parallel health systems, inducing both more inequity (because the social health insurance systems tend to be much better funded than the "MoH" systems) and structural inefficiencies, because both the social health insurance and MoH systems have to maintain not only their own health financing administrations but also in some cases a separate service delivery infrastructure.

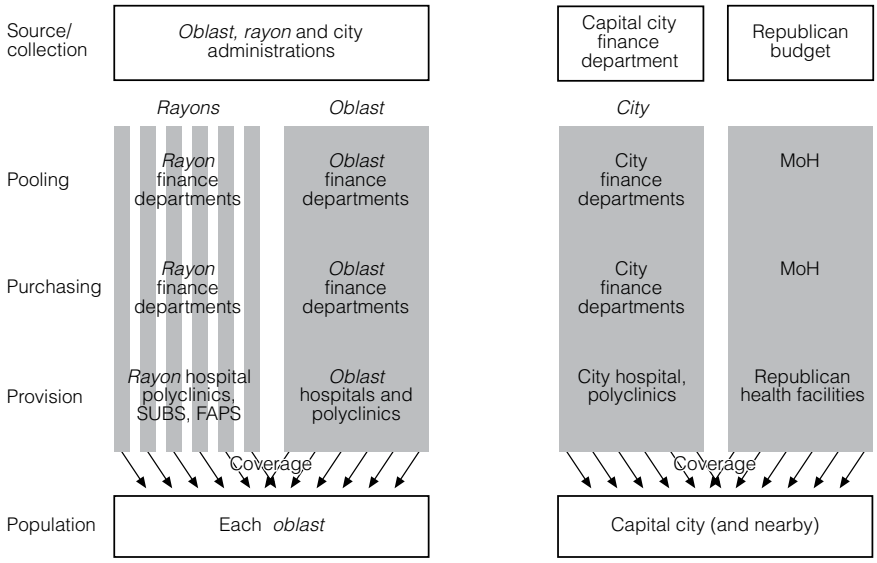

Fig. 5.2 *Health financing functions and coverage arrangements in the USSR*

Source: Adapted from Kutzin et al. 2002.

Notes: MoH: Ministry of Health; FAP: Rural physician assistant and midwife post; SUB: Rural hospital.

While an understanding of this experience was not explicitly a part of their planning process, a notable difference from the approach taken in the rest of the world was that most transitional countries made specific plans, from the beginning, to incorporate non-contributing populations into the same pool as the workers. However, the extent to which such plans were realized in practice – as well as the overall extent of coordination of general budget and payroll tax revenues – differed considerably across countries.

The Russian Federation's initial attempt to transform Semashko. As described in Chapter 2 and summarized in a simplified way in Fig. 5.2, the health financing system of the USSR was characterized by fragmented, vertically integrated financing and delivery systems based on administrative levels of government. Because administrative levels overlapped (for example, *rayons*/ cities exist within *oblasts*), financial and service delivery coverage overlapped as well. This contributed to duplication in service delivery infrastructure and limited the potential for risk pooling from a given level of public funding because it was not possible to cross-subsidize across administrative boundaries. The Russian health insurance reform introduced in 1993 was meant to create a territorial (that is, *oblast*- or region-level) pool of funds from payroll taxes and transfers from local governments on behalf of the non-working population. However, implementation was decentralized, and as a result wide variation existed in the extent to which different regional and local governments actually

provided transfers to their TFCHIs. In 2004, for example, the ratio of funds accumulated by TFCHIs to budget funds allocated by regional and local authorities directly to health care facilities varied from 16:84 in Komi-Permiazky autonomous territory to 95:5 in Samara *oblast* (Shishkin 2006). Because most regional and local governments maintained their direct allocations to the health facilities under their subordination, the new compulsory health insurance did not replace the inherited system of pooling but rather existed parallel to it, and often with no attempt to coordinate financial flows (Shishkin 1999). As described in Chapter 4, Kazakhstan's short-lived compulsory health insurance reform experienced similar problems of coordination between the territorial funds and local government authorities (Cashin and Simidjiyski 2000).

Kyrgyzstan: compulsory health insurance as a change agent for the system. Pooling reforms in Kyrgyzstan can be categorized into three distinct periods: (1) introduction of the Kyrgyz MHIF in 1997; (2) initiation and nationwide extension of the *oblast*-level "Single Payer" system for budget funds managed by the MHIF from 2001 to 2005; and (3) national pooling of general budget funds by the MHIF, beginning in 2006. The step-by-step implementation of these reforms addressed many of the fundamental problems of the inherited health financing system.

From 1997 to 2000, the MHIF functioned as a somewhat "traditional" compulsory health insurance fund in that it pooled compulsory contributions on behalf of employed people as well as transfers on behalf of specifically defined non-contributors (from the pension and unemployment funds for these individuals, and beginning in 2000 from the central budget on behalf of all children under 16 years old). However, certain decisions made prior to implementation distinguished the Kyrgyz reforms from those in other low- and middle-income countries. One was to not have the MHIF purchase an entirely separate benefits package for insured people, but rather to use its very limited resources[51] to pay additional amounts to budget-funded hospitals and primary health care (PHC) practices for the insured individuals that they served. Another was the planning and implementation of an explicit approach to reduce conflict and duplication between (1) the MHIF and its territorial departments (TDMHIFs); and (2) the MoH and *oblast* health departments. One aspect of this "joint systems approach" was the implementation of a single, unified hospital information system for all patients regardless of their insurance status. These features – combined with the initial planned incorporation of specific non-contributing groups in the system – enabled Kyrgyzstan to avoid the development of parallel health financing systems when they introduced

51 Although the addition of children in the year 2000 raised MHIF coverage from approximately 30% of the population (in 1999) to over 70%, the MHIF managed only approximately 10% of pooled health spending in 2000. A total of 90% remained under the old system, managed by local governments and central ministries (Kutzin et al. 2002).

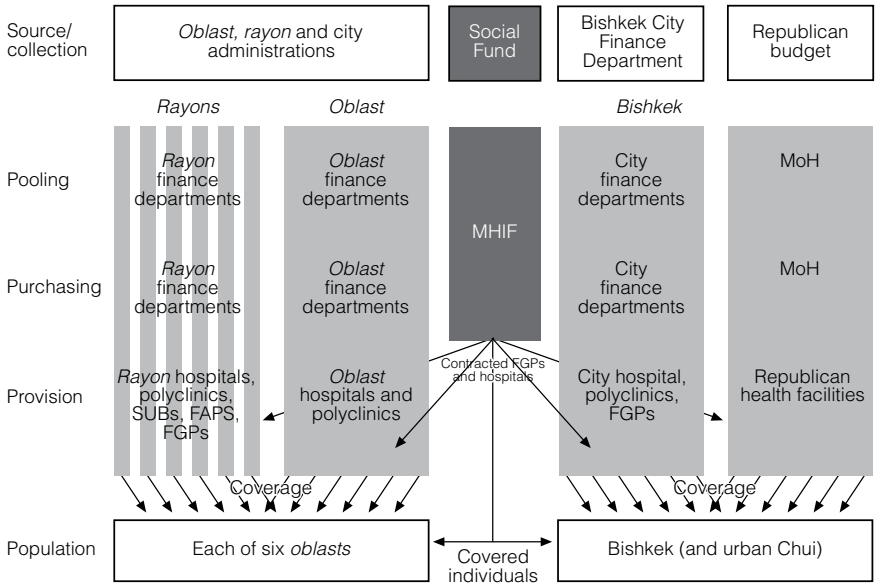

Fig. 5.3 *Kyrgyz health financing and delivery arrangements, 1997–2000*

Source: Adapted from Kutzin et al. 2002.

Notes: MoH: Ministry of Health; FAP: Rural physician assistant and midwife post; SUB: Rural hospital; FGP: Family group practice; MHIF: Mandatory Health Insurance Fund.

compulsory health insurance. However, as summarized in Fig. 5.3, no changes were made to the existing decentralized budgetary system, and hence this first period of reform did not address the underlying fragmentation and duplication problems of the inherited system (Kutzin et al. 2002).

A more fundamental reform of the system began in two *oblasts* in 2001. The principal features were the accumulation of all local government (that is, *rayon*, city and *oblast*) health budgets within the TDMHIF and the end of vertical integration between the purchaser and providers. This meant that the MHIF (through its TDs) managed a territorial pool of funds sourced from local budget revenues in each *oblast*, as well as continuing to manage the national pool for the insured population. This reform was initiated by the MoH following a government decision to eliminate the *oblast* level of many ministries, and hence reflected close coordination of planning and implementation by the MoH and the MHIF. Although it managed an *oblast*-level pool of local government budget funds (for the entire population of each *oblast*) and a national pool of "insurance money" for insured people, the MHIF used the same purchasing methods for both pools, and hence appeared to providers as a *Single Payer*. As shown in Fig. 5.4, the Single Payer reform completely eliminated the previous duplication in financing, delivery and coverage arrangements that

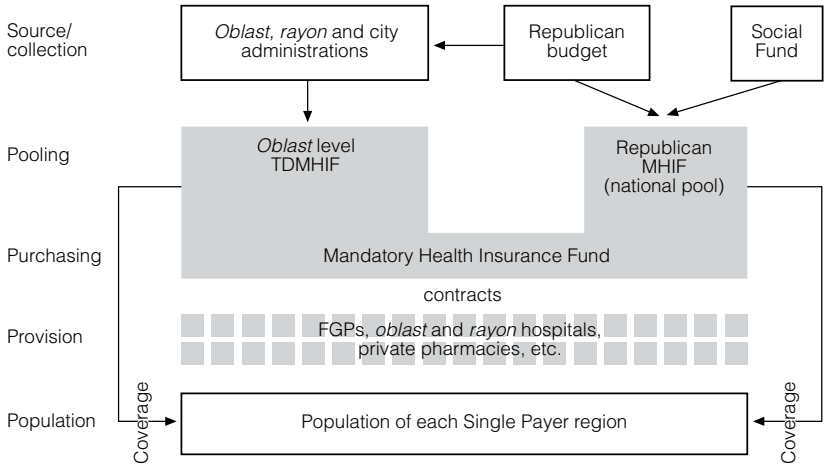

Fig. 5.4 *Financing and delivery arrangements at* oblast *level in the Single Payer reform, 2001–2005*

Source: Adapted from Kutzin et al. 2002.

Notes: MHIF: Mandatory Health Insurance Fund; FGP: Family group practice; TDMHIF: Territorial Departments of the MHIF.

existed within *oblasts*. The reform was extended to two additional *oblasts* in 2002 and nationwide coverage was reached by the end of 2004 (Jakab et al. 2005).

A law on fiscal decentralization passed in late 2004 eliminated *oblasts* and *rayons* as administrative budgetary units and left Kyrgyzstan with the choice to either centralize all budget funds for health at republican level or radically decentralize to locally elected village councils and municipalities by the start of 2006 (Kutzin, O'Dougherty and Jakab 2005). Following internal debate (and a political revolution in March 2005), the decision was made to centralize health budgets at republican level.

The Single Payer reform has resulted in substantial progress on key policy objectives, such as efficiency in service delivery and administration, transparency, equity of access and the distribution of health spending (Jakab et al. 2005). The transformation of pooling arrangements has been central to this success, but because of the nature of these reforms, it is neither possible nor sensible to attribute gains to the pooling reforms alone. Reform of pooling was a necessary condition for stimulating the delivery system downsizing and reduction in fixed costs that occurred through purchasing reforms (see Chapter 6). The reduction in duplication of functional responsibilities for pooling and purchasing that occurred with the establishment of the Single Payer system also led directly to greater administrative efficiency in the financing system (reduction in administrative cost per person for which the MHIF managed resources – see Kutzin and Murzalieva 2001). Furthermore, the centralization of pooling in

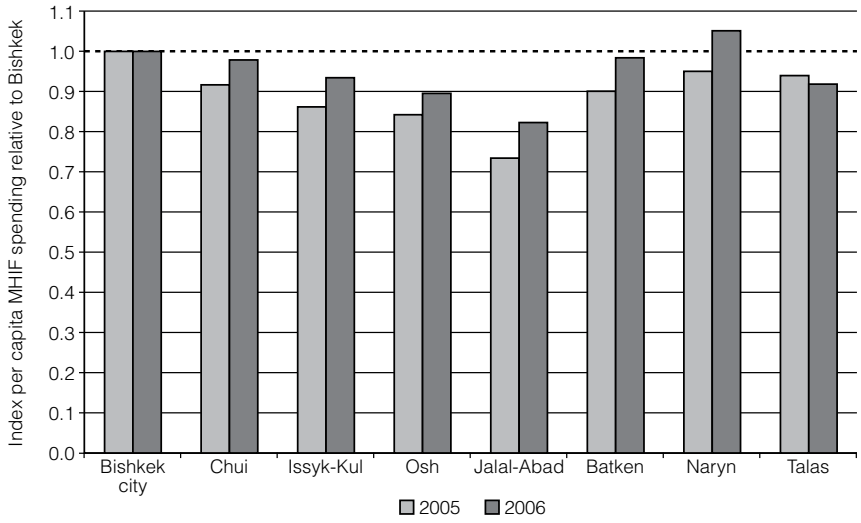

Fig. 5.5 *Equalizing effect of centralized pooling of budget funds on per capita government health spending by region, Kyrgyzstan 2005–2006*

Sources: Government of Kyrgyzstan 2006, 2007.
Note: MHIF: Mandatory Health Insurance Fund.

2006 – combined with the previous output-based provider payment methods – enabled greater geographic equity in per capita public spending on health (Fig. 5.5).

The Republic of Moldova: big bang transformation. Following a 6-month pilot in one region, the Repbulic of Moldova introduced a national compulsory health insurance system in 2004. Central to the implementation process was a transformation of the role of budget funding in the system, as formerly local government health budgets were centralized and redirected to the NHIC for defined groups of the population and pooled with the revenues from the new 4% payroll tax for health insurance. Perhaps unique in a system in which entitlement is linked solely to contribution, roughly two thirds of NHIC revenues came from budget transfers in 2004, with only about one third coming from payroll tax. By centralizing all public funding for health care and creating a purchaser–provider split, this reform completely eliminated the fragmentation of the previous budgetary system. Similar to Kyrgyzstan's 2006 experience, the centralization of pooling, combined with a shift away from input-based purchasing methods, led to greater geographic equity in government health spending per capita, as shown in Fig. 5.6. The ratio of maximum to minimum per capita spending by *rayon* fell from 4.6 to 3.5 times overall from 2003 to 2004, or (as shown in the chart) from 2.9 to 2.4 times if the two largest and most well-funded cities are excluded from the calculation (Shishkin, Kacevicius and Ciocanu 2008).

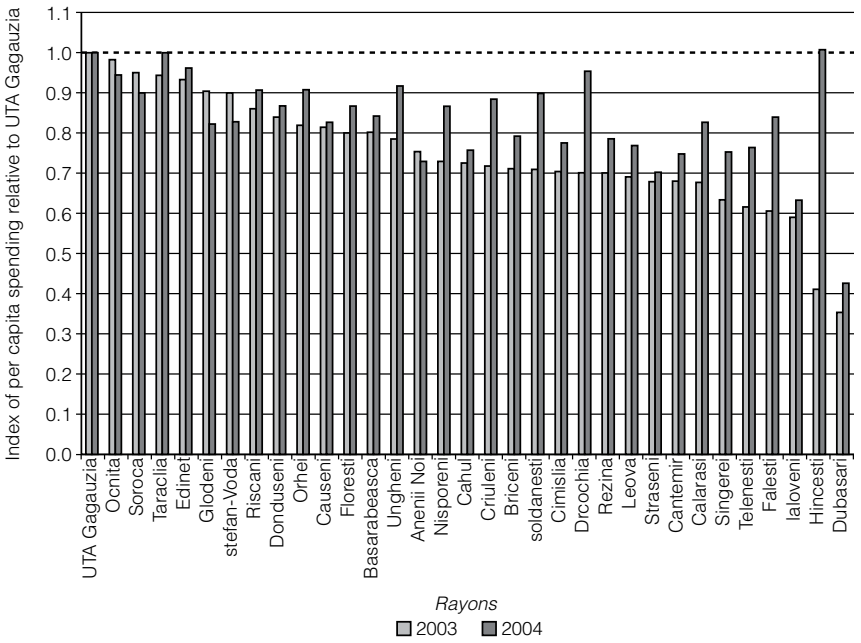

Fig. 5.6 *Equalizing effect of centralization of pooling in the Republic of Moldova, 2004*

Source: Shishkin, Kacevicius and Ciocanu 2008.

The main shortcoming of the Republic of Moldova's insurance reform – and hence the main challenge it faces – is that the fundamental shift in the nature of entitlement (from residence/citizenship to contribution) created an explicitly uninsured population. This group comprises principally self-employed individuals in agriculture, services and small commerce, along with the informal sector. It is estimated that only approximately 7.5% of people in these groups paid their contributions and that approximately 26% of Moldovans permanently living in the country were uninsured in 2005. The financing system does make some provision for the uninsured, with the NHIC managing a separate pool on their behalf that is co-financed from the national budget and cross-subsidized from the NHIC's pool for the insured (Shishkin, Kacevicius and Ciocanu 2008). However, the reform itself did induce a new form of fragmentation in the system.

By international standards, implementation of this reform occurred rapidly. This was enabled by a high level of consensus and concordance of actions, with very strong political leadership provided by the Minister of Health (which was remarkable, as the aim was for the MoH to move away from direct hierarchical financial control), backed by technical and political support from external assistance agencies, particularly during the early phases of reform. This "big bang" approach to reform was greatly facilitated by the joint implementation of

the new NHIC, the new payroll tax for health insurance and the centralization of budget allocations for health from the *rayons* to the republican level of government (Shishkin, Kacevicius and Ciocanu 2008).

Bosnia and Herzegovina: limited steps towards pooling catastrophic risk in a politically decentralized context. Political decentralization resulted in a fragmented health system with 13 health insurance funds for a population of 3.9 million people, including the central health insurance fund in the Republic Srpska, the insurance fund in District Brcko, 10 cantonal health insurance funds and the Federal Solidarity Fund (FSF) in the Federation of Bosnia and Herzegovina (FBiH). Insurance membership is defined by place of residence. As a result, the number of members in 13 health insurance funds ranged from 35 000 in the smallest cantonal pool to more than 400 000 members in Sarajevo Canton health insurance fund, and 1.1 million members in the Republic Srpska health insurance fund in 2004. Indeed, four of the cantonal health insurance funds had fewer than 100 000 members. This stands in contrast to the single MHIF for Kyrgyzstan's population of 5.3 million and the single NHIC for Moldova's 4.2 million people.

The presence of multiple small pools, differences in contribution rates[52] and socioeconomic situations across entities and cantons – along with the absence of a system for re-allocating funds between these territorial pools – had combined and separate harmful effects. The large number of small pools resulted in very high ratios of staff per covered person, indicating the presence of administrative inefficiency when considered at the level of the entire system. The inability to redistribute funds across pools meant the relative size of each pool reflected the contribution capacity of the territory it served, rather than the underlying health care needs of the covered population. This was further exacerbated by budgetary transfers to the health insurance funds that reflected the financial situations of entity and cantonal governments, rather than compensating for socioeconomic differences between them. The result was geographic inequity in resource allocation (Fig. 5.7) that in turn contributed to what were – in effect – unequal benefits packages for insurees. Some cantonal funds offer only a limited range of secondary care and no tertiary care, causing patients to pay out of pocket for services, and hence poorer cantons charged higher co-payments to patients to raise additional funds for health, thereby increasing the financial barriers in access to care. The consequences of this are geographical (and probably related socioeconomic) inequities in access to and financing of care, as well as in the distribution of financial protection (World Bank 2003). The small pools also threatened the financial balance of the cantonal health insurance funds, each of which was in deficit in 2003 (World Bank 2006a).

52 Such as for farmers (who pay either 10% of the minimum wage or a flat amount in some cantons), pensioners, unemployed individuals, disabled war victims and voluntary insured people.

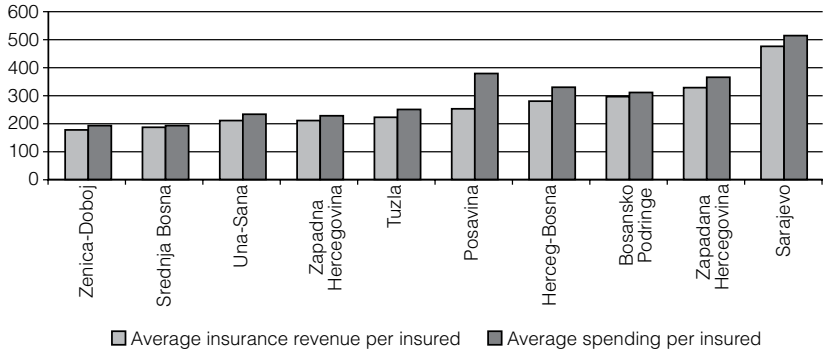

Fig. 5.7 *Revenue and expenditure per member per year, across Health Insurance Funds, in KM, 2003*

Source: Federal Solidarity Fund BiH 2004.

Overall, fragmentation in pooling is one reason why the country was an outlier in terms of its high share of OOPS in total health expenditures relative to its high level of government health spending as a share of GDP (see Chapter 3).

Despite the political constraints on cross-cantonal pooling, the FSF was introduced in the FBiH in 2002. It receives 8% of total payroll contributions, whereas the 10 cantonal health insurance funds receive the remaining 92%. The FSF pays for high-cost treatment of specific diseases and procures high-cost drugs. Since 2004, there has been a steady increase in the number of patients with access to FSF-insured high-cost treatment, according to FSF data. This improved access reflects the utilization gains acquired as a result of creating a central pool for high-cost treatments, as well as centrally contracting these treatments through the FSF with hospitals. While this reflects improved access to care through centralized pooling, the gains to date have been limited. In order to attain significant gains, the current 8% share paid to the FSF would need to be increased substantially, for example to include coverage for all hospital care (World Bank 2006a).

Albania: incoherence in pooling, unclear accountability for performance. In 1995, Albania established the Health Insurance Institute (HII) as an autonomous public agency with the aims of securing additional funding for the health system and of promoting greater equity and efficiency in the system through effective use of its purchasing power. Despite the intent to make the HII a single payer at the time it was created, pooling arrangements in the Albanian system remain fragmented. The introduction and subsequent evolution of the HII was not coordinated in a coherent manner with other arrangements for pooling public funds and purchasing health care services. The fragmentation of the system is portrayed in Fig. 5.8. Several agencies pool, including the

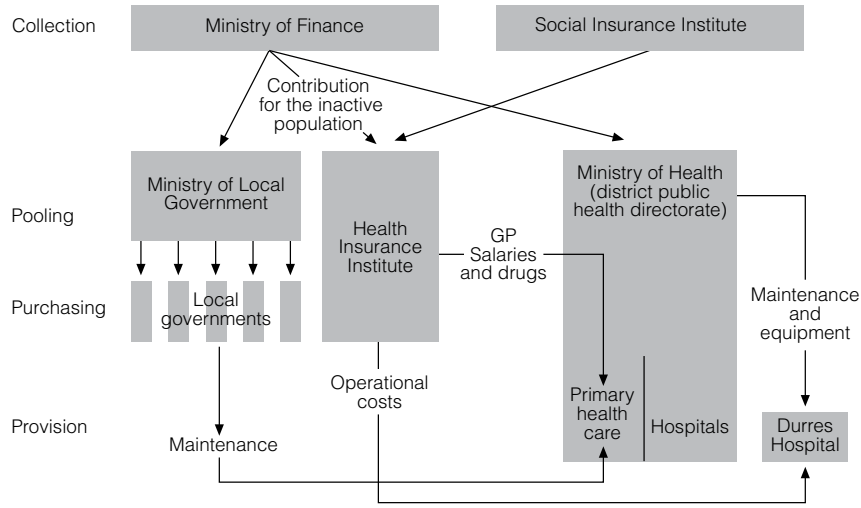

Fig. 5.8 *Fragmentation in Albania's health financing system, 2004*

Source: Adapted from Couffinhal and Evetovits 2004.

Note: GP: General practitioner.

HII for physician salaries and pharmaceuticals in primary care;[53] the MoH for other personnel and operating costs in PHC, and for most hospitals; and local governments for equipment and facility maintenance in primary care. Hence, there is fragmentation of pooling for primary care and – because this is integrated with purchasing – the system lacks a coherent financing mechanism to promote efficiency and quality. Fragmentation of pooling (and purchasing) across levels of care also inhibits effective coordination of service delivery (Nuri and Tragakes 2002; Couffinhal and Evetovits 2004). This fragmentation exists despite the fact that the HII and the MoH pool funds nationally. Although national-level pooling should at least facilitate equity in the distribution of health resources, there remains substantial variation in allocations per capita across regions. Indeed, 2004 data indicate that the lower the regional poverty rate the higher the per capita allocations from all public sources. This illustrates that national pooling alone is not sufficient for equity improvement and suggests that the combination of pooling and purchasing arrangements in Albania contributes to poor performance in terms of equity and financial protection (World Bank 2006c).

ii. Reforms in pool market structure: centralization, consolidation and competition

For countries that introduced independent (to varying degrees) agencies to pool funds or changed the role of existing agencies, a key reform theme has been to alter the market and/or administrative structure of these agencies.

53 The HII also pools for hospital services in one pilot region (Durres).

This has taken several directions, including the consolidation of formerly separate agencies into a smaller number, or even a single, fund; changing the roles of various existing agencies; or putting a formerly centralized single fund into competition with other insurance funds for enrollees.

Centralization and transformation from separate regionally based pools to administrative branches. In the early 1990s, most CE countries introduced new agencies to pool funds and purchase services on behalf of the population under the rubric of introducing "health insurance".[54] In many cases, multiple agencies/funds were introduced initially. Sometimes this involved a single pooling agency with territorial administrative branches, whereas in other cases pooling itself was decentralized to territorial funds (that is, not only the administration of funds, but the actual bearing of financial risk was also decentralized). Most countries that began with multiple branches or funds have progressively centralized them, and in countries where pooling was decentralized, territorial sickness funds have been transformed into territorial branches of the national fund. The Baltic countries have each gone through this process.

Estonia's Health Insurance Act of 1991 – along with a related 1994 law on the organization of health services – established a contributory compulsory health insurance system based on multiple sickness funds organized as independent public agencies at the level of counties and large cities. Problems with the small scale of such funds (such as the ability to find sufficient qualified staff to run a large number of small funds, insufficient revenue base in poorer counties, and so on) led to the establishment of the Central Sickness Fund in 1994, with responsibility for coordinating the 22 county-based funds. In 2001 the EHIF replaced the Central Sickness Fund, and the territorial funds were transformed into four EHIF regional departments. The EHIF manages a single pool but devolves budgets for its branches to administer. This centralized pooling creates conditions for both more effective purchasing and risk pooling for the country's 1.3 million people.[55] While it is difficult to attribute causality precisely, available evidence suggests that the EHIF has been effective at redistributing its limited resources to protect the population against financial risk. EHIF data from 2003 (reported in Couffinhal and Habicht 2005) show that 1% of the covered population accounted for 29% of the cost of services paid for by the EHIF, and 5% of the population accounted for 54% of the cost. This pattern is consistent

54 In some cases (such as that of Latvia, Lithuania, Poland and Romania), these are not really "social health insurance" funds in the sense that the population served by each of these agencies is entitled to coverage on the basis of residence or citizenship, rather than being contingent on a contribution made by (or on behalf of) the covered individuals.

55 As a result of the close links between pooling structure and the capacity to purchase, it is difficult (and from an implementation perspective, not necessarily even sensible) to separate these issues in practice. While it is evident that a pooling structure that consolidates revenues in a single agency would create greater potential purchasing power than if this took place in multiple pools (especially for countries with small populations as the Baltics), it is not clear whether this centralization of pooling can be accurately characterized as a "necessary condition" for stronger purchasing (it is obviously not a sufficient condition).

with the assumption that those with greater need receive a greater value of EHIF resources. Further, given the relatively low share of OOPS in total health expenditures and low measured incidence of catastrophic and impoverishing spending, the centralized EHIF seems to offer effective financial protection to the population.[56]

It is perhaps remarkable that centralization was even an issue at all in small countries such as the three Baltic states (in **Latvia** and **Lithuania** as well, there were initially small decentralized pools that were gradually consolidated and transformed into departments of national pooling agencies), as the need for consolidation of pooling and administrative functions would seem obvious. But the initial context of transition included an emphasis on local control of resources, and the health sector was not immune to this. It was only with time and experience that consolidations took place even in these small countries. Some larger countries have also witnessed centralization of pooling. **Poland** established 16 regional sickness funds in 1999 but merged these into a single National Health Fund in 2003. Among many shortcomings, the 16 funds were characterized by variation in their level of funding, with those based in richer regions able to offer greater funding than those based in regions suffering from lower incomes and higher unemployment. Despite a formula that enabled some re-allocation across funds, the gap in per capita expenditures between the "richest" and "poorest" sickness funds grew, reaching more than 25% by 2002 (Kuzewski and Gericke 2005). Hence, the redistribution mechanism was not sufficient to prevent decentralized pooling from being a source of inequity.

Restructuring within the public financial management system. Kazakhstan and Uzbekistan took a different path to centralize and alter the market or administrative structure of agencies involved in pooling and purchasing. Rather than creating new agencies and then consolidating them over time, they changed the roles and relationships of existing health sector agencies. During the Soviet era, pooling and purchasing existed at the MoH, *oblast* health departments, city health departments, and *rayon* health departments. Kazakhstan and Uzbekistan have each established budget consolidation and pooling at the *oblast* level with the *oblast* health department as the single payer managing this *oblast*-level pool of funds.[57] The city and *rayon* health departments retain policy and service delivery responsibilities but no longer have pooling or purchasing responsibilities. These changes have increased equity in health spending per capita within *oblasts* and have also established the conditions for health delivery system restructuring

56 Unfortunately, the evidence also shows that while the Estonian system offers good financial protection compared with most other countries of similar income and government health spending levels, the extent of this protection has been gradually decreasing since 1996, parallel to a consistent decrease in total government health spending as a share of GDP and an increase in the share of OOPS in total health spending (Habicht et al. 2006).

57 In Uzbekistan, this applies to funds for primary care only. In Kazakhstan, this occurred after the cancellation of their compulsory health insurance system, which was in place from 1996 to 1998.

and increased efficiency, by enabling reductions in duplicative health system capacity across country administrative levels (Katsaga and Zues 2006; Routh 2007).

Competition and risk adjustment in the Czech Republic. The Czech Republic returned to its pre-Second World War Bismarckian roots and reintroduced a social health insurance system shortly after the 1989 "Velvet revolution". The main reasons put forward for this change were to increase flow of funds into health care and to make financing independent of the state budget but pegged to economic growth (Massaro, Nemec and Kalman 1994). The General Health Insurance Company (VZP) was established in 1992 and was responsible for collection and pooling of premiums, as well as purchasing health care services for the entire population. Following the establishment of the VZP, the Czech Parliament approved a law enabling the foundation of competing non-profit-making insurers established as public institutions. The first of these started operating in 1993. They were primarily organized around large employers or by industry sectors, and were thus called *branch* or employers' health insurers. Their number reached 27 in 1995 and then decreased rapidly as many of them experienced financial problems. By the year 2000, the number of insurers stabilized at nine, and 60% of the population remained insured by the VZP.

Because the branch insurers were organized mainly to serve particular industries or firms, they attracted primarily employed citizens. Retired people stayed with the VZP. This caused a rapid deterioration of the financial situation of the VZP, both because of the difference between the average premium paid by employed citizens and the contribution for economically non-active citizens paid to insurers by government,[58] and because of the difference in the average expected health care needs of the relatively younger and healthier branch insurers' clients versus the older population served by the VZP. Because the majority of the population was served by the VZP, its financial deterioration effectively meant that the maintenance of isolated pools soon became both a financial and a political problem for the system as a whole.

The Czech Government responded by introducing some features of risk adjustment in 1994 to enable pooling of funds across insurers. While collection of premiums remained in the hands of individual insurers, the VZP administered a centralized database of all insured people and a pool redistribution system. The revenues subject to the risk-adjustment mechanism included the entire state contribution on behalf of economically inactive people ("state insurees") and 60% of the premiums collected from the economically active population.

58 The state contribution was set several times lower than the average collected premium. While the exact ratio between the two payments varied from one year to another, the difference remained huge. Ministry of Finance data, for example, indicate that the average collected monthly premium amounted to CZK 1393, while the state contribution only to CZK 392 per person in the first half of 2001.

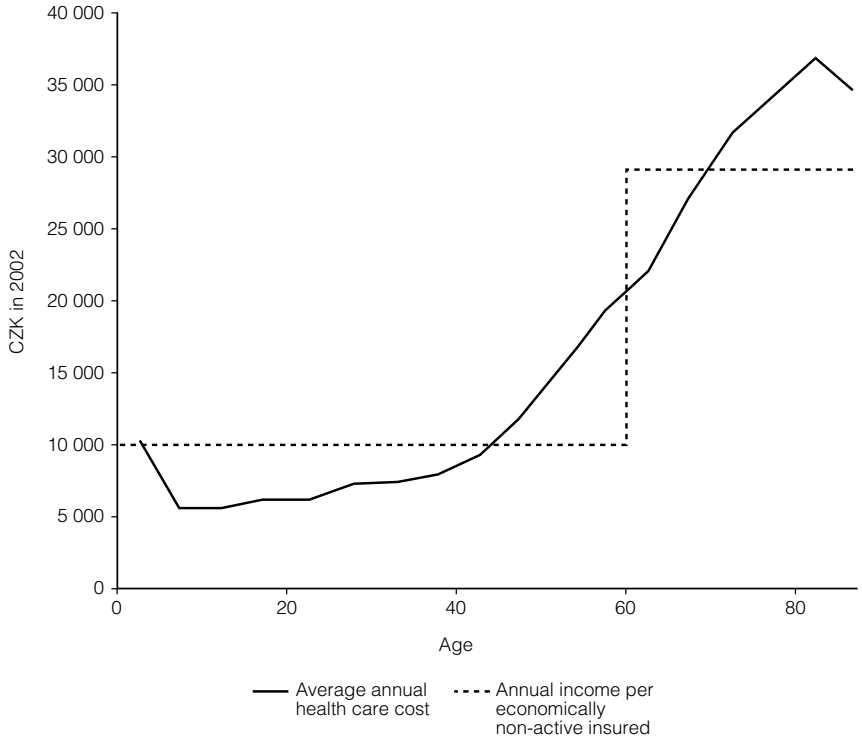

Fig. 5.9 *Opportunities for cream-skimming in the Czech system before introduction of the new risk-adjustment mechanism*

Source: VZP 2003 and annual reports of other Czech insurance companies for 2002.
Note: CZK: Czech koruna.

The funds were redistributed between insurers according to the number of state insurees enrolled with each of the insurers, with a rough adjustment for age. Within the state insurees, two age categories were recognized – below and above 60 years of age. State insurees above 60 years old were counted in the risk-adjustment formula with triple weight.

This arrangement enabled a more equitable division of available resources between the VZP and other health insurers, but it did not eliminate incentives for cream-skimming. Insurers were not allowed to reject any client, but they engaged in various other tactics to select profitable clients based on their income, age or health status. It was particularly easy to target specific profitable age groups (especially those under 40 years). The branch insurers had a comparative advantage as a result of their better access to information on the employed people within their industry of activity. For example, they offered extra marginal benefits suited for specific groups of people, such as partial reimbursement of contraceptives that were not covered by the social

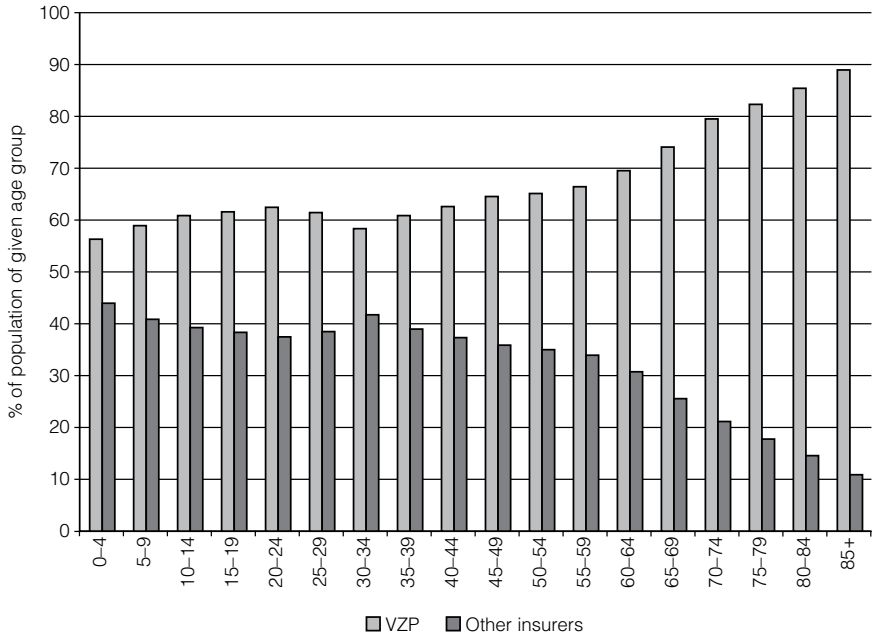

Fig. 5.10 *Uneven distribution of age groups between insurers in the Czech Republic as of 2004*

Source: VZP 2005.

Note: VZP: General Health Insurance Company (Czech Republic).

health insurance, as well as vitamins, and so on.[59] Enormous differences (up to 50%) existed in average premiums collected from the economically active population, thus presenting an important handicap for insurers with higher shares of lower-income policy-holders. Regarding the economically non-active insured population, the average gain per client aged from 1 to 40 years was several thousand Czech korunas per year, while an average client aged between 50 and 60 years or older than 70 years implied similar or higher loss (Fig. 5.9). This situation further supported uneven distribution of age groups between insurers (Fig. 5.10).

The age structure of the VZP's clients, combined with the low level of state premium payments received on their behalf, contributed to its repeated deficits. Conversely, after their consolidation, the other insurers reported mostly positive or at least neutral results. The VZP, therefore, repeatedly tried to change the risk-adjustment formula. The efforts and discussions focused on two issues: (1) scope of pooling (what percentage of collected premiums should be subject to redistribution); and (2) method of risk adjustment (how many age categories should be used and whether the mechanism should include compensation for expensive cases). Several efforts to change the risk-adjustment system failed in

59 However, such tactics are limited by available resources of an insurer for preventive care (set as a fixed percentage of its collected premiums) and the scope to which such benefits can fit within this category.

Box 5.1 *Risk adjustment in the Czech Republic after 2003*

The 2003 law introduced complete pooling of the state payment and all collected premiums, which are redistributed between insurers on a capitation basis (see Fig. 5.11), adjusted for age and sex (altogether 36 age/sex categories). Each insurer reports on a monthly basis the total amount of its collected premiums, as well as the number and age structure of its insured individuals. State payments for economically non-active citizens flow directly to a special account operated by the General Health Insurance Company (VZP) under the supervision of other insurers and the Ministries of Health and Finance. The account's manager then calculates the total amount of income (collected premiums + state payment) per "standardized" insured individual for the whole system and the income of each insurer based on its actual number of insured individuals and their age/sex structure. Differences between collected premiums and the income of a particular insurer after redistribution are cleared within days by one-off payments between insurers and the manager of the special account. Data provided by an individual insurer may be checked by a specialized task force consisting of representatives of all insurers or by the ministries. Also, the data on redistribution results are available to all insurers so that they can follow their competitors' reports on a continuous basis.

In addition, the system includes an ex-post partial compensation of expensive cases (a standardized methodology of accounting costs to each individual insured person was issued together with the 2003 law). If the annual costs of a client reach the limit of 25 times the average annual costs per client in the whole system, the insurer is compensated with 80% of the over-the-limit costs. Advances to cover expensive cases are divided between insurers based on historical numbers. Differences between these advances and the actual cost of expensive cases are compensated once a year when the prior year's financial results are published. In 2005, the compensation of expensive cases included 0.2% of the total population and the redistribution of 5% of total funds between insurers (Hroboň, Machecek and Julinek 2005).

the Parliament, mainly due to the resistance of other health insurers. Finally, a new law was adopted in 2003 that completely changed the redistribution system to include pooling of all revenues for health insurance and a more sophisticated risk-adjustment formula. Implementation of the new formula was phased in over three years to allow all health insurers to adjust to their new income levels (see Box 5.1). After full implementation, the new system was supposed to increase the VZP's income by 3% while lowering the income of all other insurers, ranging from a marginal impact to a 14% reduction (Hroboň 2003). The phased-in implementation proved to be the crucial factor for political acceptance of the reform.

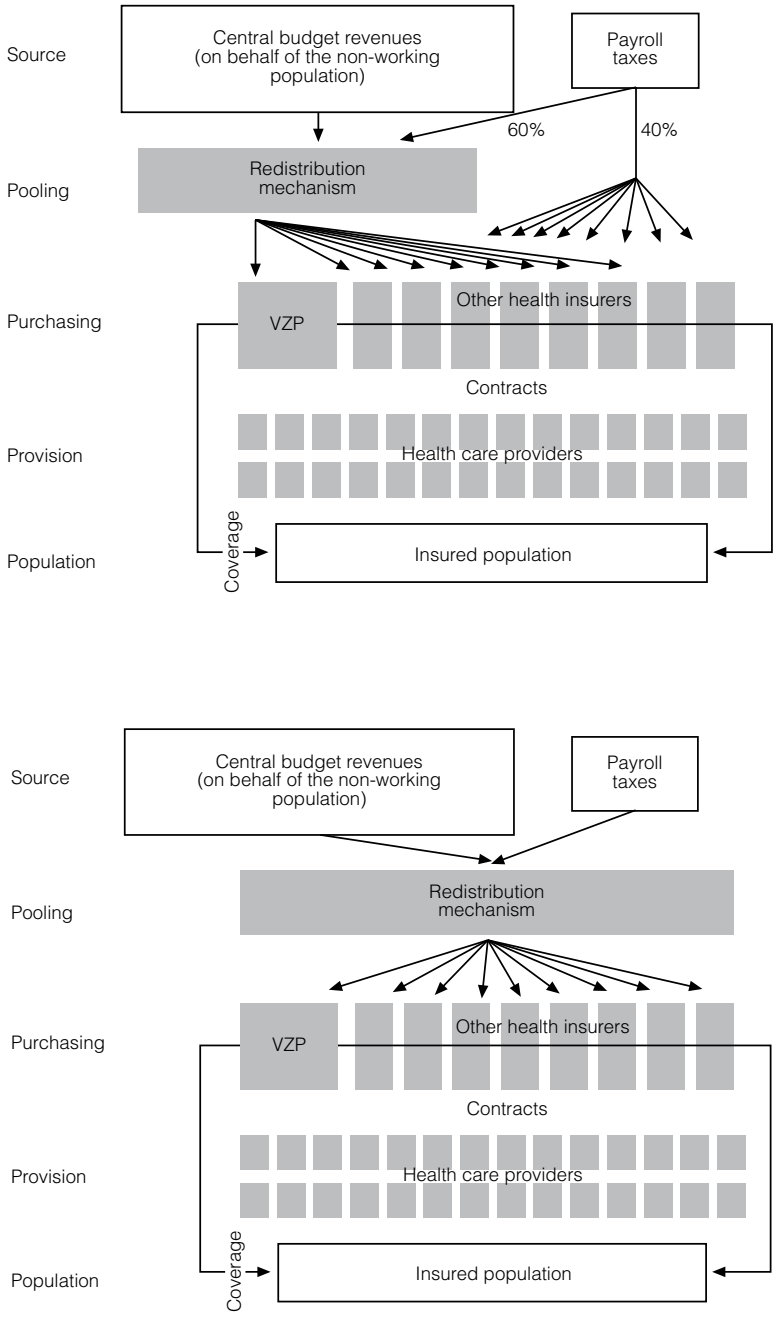

Fig. 5.11 *Pooling arrangements in the Czech Republic before (top) and after (bottom) the 2003 reform*

Note: VZP: General Health Insurance Company (Czech Republic).

The purpose of the new law was twofold. First, to strengthen financial protection and equity through improvement of the VZP's financial balance relative to its competitors. While all insurance companies protected their clients against financial risk, the worsening financial balance of the VZP led in some cases to impaired access or at least less-favourable treatment of its clients by providers in comparison with clients of other insurers. The second purpose was to improve the efficiency of the health system by changing the focus of insurers' efforts from competing on pooling (by investing in efforts to attract people with the highest probability of a positive margin between revenue and expenditure) to competing on improving health services purchasing. While a positive financial result (important even in a non-profit-making institution) formerly used to be reached by the selection of rich, young or healthy clients, the new approach to pooling and risk adjustment reduced the potential benefit of engaging in the selection of clients according to preferred age or income categories. Because the reformed system results in a better match between each insurer's income and its policy-holders' risk structure, insurers have much stronger incentives to compete on the basis of improved cost management and overall quality of their services. Although improved purchasing practices have not yet materialized,[60] a sufficient level of risk compensation is a necessary condition to minimize "strategic pooling" behaviour by insurers. Because such efforts at cream-skimming do not contribute to any sectoral objective, reforms that reduce the private benefits from such behaviour are by nature efficiency enhancing.

Imperfect competition and fragmentation in the Russian Federation. As described above, the Russian Federation introduced compulsory health insurance in 1993. This reform replaced the decentralized and overlapping pooling structure with a single pool of funds at the level of each *oblast*, managed by a TFCHI. There were two reasons why this did not eliminate fragmentation, however. First – and contrary to reform plans – local governments rarely redirected all of their health revenues to the TFCHIs, but instead continued to finance their health care facilities directly. Second – and from the beginning of the reforms – the intention to introduce a competitive model with private insurers was declared and implemented.[61] Having created the potential for reducing fragmentation by initiating a single pool at *oblast* level with the TFCHI, the introduction of competing insurers without an effective risk-compensation mechanism in place allowed the pool to be fragmented again, although along different dimensions.

60 One reason for this lack of progress has been a failure to maintain an appropriate regulatory environment to promote efficiency on the provider side. For example, hospital reimbursement rates have been set by a series of governmental decrees that were clearly aimed at ensuring the survival of all hospitals within their historical structures. This has led to a situation in which funds are allocated to insurers according to the number and relative risk of their clients, but each insurer's internal allocation of funds to clients in different regions is based on historical patterns of payment to providers in order to comply with these regulations (Hroboň, Machacek and Julinek 2005).

61 However, the extent to which this was implemented varies considerably across the country.

In fact the Russian compulsory health insurance system has two types of entity that perform the role of insurers: (1) health insurance organizations (usually private profit-making entities); and (2) TFCHIs and their branches. By 2004, the Russian Federation had 348 health insurance organizations, 10 regional compulsory health insurance funds, and 378 branches of compulsory health insurance funds operating as insurers. In 47 regions of the Russian Federation, health insurance organizations were the only compulsory health insurance insurers; in 19 regions this role rested entirely with compulsory health insurance funds and their branches; and in 23 regions both types of insurer coexisted.

Risk adjustment is carried out by the Federal Compulsory Health Insurance Fund, among TFCHIs and by these Funds among insurers. A diversity of risk-adjustment methods is used. By 2004, in 51 of the 70 regions in which private insurers operated, TFCHIs allocated funds among them by capitation. Of these, age and sex adjustment was employed in 35 regions, and by one of these factors (but not both) in five regions (Independent Institute for Social Policy 2007). In four regions more sophisticated methods of risk adjustment were employed, and in seven regions completely unadjusted capitation was used. In the other 19 regions with private insurers, as well as the 19 regions with only public insurers, funds were distributed simply according to actual expenditures in the previous year. However, it is likely that these different risk-adjustment practices have had limited impact on insurers' behaviour towards different categories of insurees, because the amount of money transferred to the insurance companies will be less than that needed to meet the costs of funding the benefits package for insured people. In this condition of public under-funding of free health care guarantees, insurers have the possibility to transfer risks and expenditures to providers, who in turn shift them on to patients by demanding informal payments. Therefore, in this context, risk adjustment exists but is not especially relevant because the rest of the system is not in financial balance: the insurers just want to obtain the revenues and thus earn more money as a fixed percentage of the sum received from the TFCHIs (Shishkin 2006).

In the Russian Federation, the transition from the old to the new system of health financing was incomplete. The sequence and pace of transition were never established by Russian legislation, and implementation of compulsory health insurance has been poorly controlled by federal authorities and depended mostly on the attitudes of regional authorities (Sheiman 1997; Shishkin 1999). Competition among insurers exists but only to a limited extent and in forms that do not create strong incentives for improving the accessibility and quality of services. After 15 years of reform implementation, the Russian health financing system combines old and new forms of pool fragmentation and overlap. In addition, the deficiencies in regulatory arrangements for insurers do

not provide sufficient safeguards against corruption. Insurers compete fiercely for contracts with territorial authorities for insurance of the non-working (subsidized) population and with employers for insurance of their employees, but inadequate regulation and lack of transparency in the awarding of such contracts shift the focus of competition to the amount of shadow payments made by insurers to government officials and firms (Shishkin 2006).[62]

D. Lessons from implementation experience

Fragmented pooling arrangements pose a threat to policy objectives and a challenge to the design and implementation of financing reforms. The examples presented in this chapter include cases in which reforms have successfully reduced fragmentation, along with others in which new forms of fragmentation have been the product of ill-conceived or poorly implemented reforms. As illustrated by the examples explored here, fragmentation can take many forms:

- decentralized pooling by local government health agencies with overlapping population coverage (the USSR and unreformed successor countries such as Ukraine and Belarus);
- decentralized pooling by territorially distinct but small (district/cantonal/county) health insurance agencies (the former Yugoslavia and continuing in Bosnia and Herzegovina; Estonia and the other Baltic countries prior to consolidation);
- overlapping, uncoordinated population or service mandates between local government health agencies and compulsory health insurance funds (Albania, Russian Federation);
- fragmentation of responsibility for different line items of expenditure between different pooling agencies (Albania);
- fragmentation between competing compulsory health insurance funds and local government health agencies (Russian Federation); and
- fragmentation between competing compulsory health insurance funds (Czech Republic, Russian Federation).

The main problem arising from these various forms of fragmentation is systemic inefficiency and inequity: for a given level of revenues, systems can redistribute less than they could if funds were managed in larger pools. As a result, they can obtain less financial protection and less equity in health spending than would be possible within the scope of their overall resource envelope. Depending on the size of the covered population, the existence of multiple pools can also

62 In late 2006, the top managers of the Federal Compulsory Health Insurance Fund and some regional health insurance funds were arrested on corruption charges.

induce higher administrative expenses than would be needed with fewer pools or a single pool.[63]

The experience of transitional countries with pooling reforms illustrates some important lessons. One such lesson is that reform of fragmented pooling arrangements is a necessary but not sufficient condition for progress in terms of policy objectives. Reforms that reduced fragmentation in pooling, as in the Kyrgyz or Moldovan examples, only established the enabling conditions for redistribution. Actual redistribution occurs when the money is spent: that is, via the purchasing function.[64] If purchasing methods remain input based (see Chapter 6), historically inequitable patterns of resource allocation can remain, even with a national pool. Nevertheless, pool fragmentation must be addressed if gains are to be achieved. Improving purchasing methods will have little impact where pooling is either extremely decentralized (Bosnia and Herzegovina) or suffers from reform-induced fragmentation (Albania, Russian Federation).

Countries have adopted several successful strategies to reduce fragmentation in pooling or mitigate its consequences. The most frequently selected direction has been through reforms to create single, territorially distinct pools of funds covering increasingly larger numbers of people. For countries that began their compulsory health insurance systems with multiple territorial funds, inter-regional fragmentation was reduced by progressively reducing the number of funds (that is, increasing the size of the territory and population covered per fund pool) and also by transforming the territorial funds into administrative branches of the national fund (such as in Latvia, Estonia, Lithuania and Poland). These steps increased the size of the pool and hence the scope for redistribution, while also enabling potential efficiency gains in the administration of the system. The Estonian experience suggests that when these measures are combined with effective purchasing methods, gains in financial protection and efficiency can indeed be realized.

For (particularly former Soviet) countries that still have to face the challenge of decentralized pooling, the strategies implemented by Kyrgyzstan and the Republic of Moldova suggest a clear path: eliminate *rayons*/districts as pooling entities and move towards either *oblast*- or national-level pooling. Perhaps the most critical question facing countries in this context is whether to introduce compulsory health insurance. Certainly, the Kyrgyz and Moldovan experiences included the establishment of a compulsory health insurance fund that was supported, at least in part, by a new payroll tax. While it was conceptually

63 While there are economies of scale in administration, the size of the covered population at the point at which there are no longer reductions in unit administrative costs per person is unknown and is likely to vary with the specific types of administrative function that are performed.

64 Where inter-pool re-allocations exist to compensate for variations in the relative risk of the covered population (such as in the Czech example cited above), redistribution also occurs via the pooling function.

possible to move towards broader territorial-based or national pooling within the budgetary system, this proved to be impossible to implement in practice in these two countries, and in each case, success at reducing fragmentation was achieved by going outside the public financial management system and replacing it with the compulsory health insurance pool. *Oblast*-level pooling within the budgetary system has occurred in Kazakhstan, although this may be a legacy of its failed experience with compulsory health insurance. Uzbekistan has also initiated *oblast*-level pooling, using the step-by-step approach of gradually incorporating different types of service into the pool. In the Kazakh and Uzbek cases, however, it remains to be seen whether gains parallel to those achieved in Kyrgyzstan and the Republic of Moldova will be attained as a consequence of these efforts.

The failure to completely replace the former system with the new fund structure, as in the Russian Federation and Albania, indicates clearly that introducing compulsory health insurance is not sufficient for the success of pooling reforms. The critical lesson – especially for countries in contexts in which employment-related payroll taxes will not be a dominant source of public funds – is that to maintain a universal system and address existing fragmentation, the introduction of compulsory health insurance must be paired with a strategy to simultaneously reform the flows and pooling arrangements for general budget revenues. This would involve either pooling the budget revenues with the payroll tax revenues in a single national pool (the Republic of Moldova) or explicitly coordinating the budget-funded pool with the payroll tax-funded pool (Kyrgyzstan). Simply introducing compulsory health insurance without corresponding changes in the budget-funded system – as in Albania and many low- and middle-income countries elsewhere – can actually worsen the problem of fragmentation in the entire system.

Another option to address fragmentation in the context of multiple pools is to create, in effect, a *virtual single pool* among them through redistribution. This can be achieved through risk-adjusted allocations to territorially distinct pools or to competing insurers. The consequences of fragmentation are more severe in the case of competing insurers because, without risk adjustment, cream-skimming behaviour by insurers will also mean either higher premiums for those with the greatest health care needs or financial shortfalls for the funds serving these populations, with consequent deterioration of their ability to provide access and risk protection. Hence, the experience of the Czech system is instructive for countries in this context. While no risk-adjustment formula is perfect, of critical importance is whether the mechanism used is good enough to reduce or eliminate risk-selection behaviour by competing insurers. The 2003 Czech reforms appear to have achieved success by subjecting the entire insurance pool

to redistribution (thereby maximizing the scope for risk protection) and at the same time lowering the benefits from risk selection for the competing insurers.

There is no "right" or "best" arrangement for the pooling of funds. As with all reforms, the essential starting point for decision-makers is an understanding of existing arrangements. Both theory and evidence suggest, however, that from this starting point reforms should aim to reduce fragmentation of pooling. Options for doing this vary considerably across countries. For example, even with the constraints of politico-administrative decentralization in Bosnia and Herzegovina, limited steps towards reducing fragmentation have been possible through cantonal pooling of catastrophic risk in the FSF. The Kyrgyz and Moldovan reforms are particularly instructive for other former Soviet countries, as well as for low- and middle-income countries elsewhere that face tight revenue constraints and are interested in introducing new revenue sources. The Estonian experience is more straightforward: reduce fragmentation by progressively centralizing previously decentralized pooling arrangements. The Czech experience of progressively improving risk adjustment between insurers provides a positive example of how to reduce the consequences of fragmentation in competitive insurance contexts. These diverse experiences suggest that countries need to identify the manner in which their existing pooling arrangements are fragmented and implement strategies focused on resolving this. While the evidence reviewed here offers useful lessons, reforms cannot be exported directly from one country to another. The key is to identify the steps that need to be taken in a particular context to address the challenge of pool fragmentation.

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Since 1990, the paths of the so-called *transition countries* of central and eastern Europe, the Caucasus, and central Asia have diverged with regard to their social and economic policies, including the implementation of reforms in the financing of their health systems. Until now, this rich experience has not been analysed in a systematic way.

The book begins with the background to health financing systems and reform in these countries, starting with the legacy of the systems in the USSR and central Europe before 1990 and the consequences (particularly fiscal) of the transition for their organization and performance. Relying on in-depth country case experiences, reforms are analysed first from a *functional* perspective, with chapters focusing on how policies were implemented to change mechanisms for revenue collection, pooling, purchasing and policy on benefit entitlements. Highlighted in subsequent chapters are particular reform topics, such as:

- financing of capital costs
- links between health financing reform and the wider public finance system
- financing of public health services and programmes
- role of voluntary health insurance
- informal payments
- accountability in health financing institutions.

With many authors having practical experience of implementing, advising, or evaluating health financing policies in the region, the book offers important lessons as well as pitfalls to avoid in reform processes. This book is essential reading for health finance policy-makers, advisers, and analysts in this region and beyond.

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