Similar but different: Health and economic crisis in 1990s Cuba and Russia

Iris Borowy*
Centre Alexandre Koyré, CNRS – Cermes3, 7 rue Guy Moquet, 94801 Villejuif, France

ARTICLE INFO
Article history:
Available online 8 April 2011

Keywords:
Economic crisis
Public health
Cuba
Russia
Social capital
Mortality
Gender

ABSTRACT
The collapse of the Soviet Bloc caused devastating economic crises in Cuba and in the Russian Federation but triggered remarkably different public health responses: while mortality rates in Russia increased substantially the crisis was barely visible in Cuban public health statistics. Fundamental social, political and cultural differences in the two countries and the respective specificities of the crisis in either country seem responsible, including different long-term health trajectories and different traditions of health-related agenda setting. Cuban policies combined traditional top down activism with grass root activities, strengthening social capital, while the “shock therapy” adopted in Russia had a corrosive effect on society, increasing psycho-social pressure and weakening support.

Introduction
The relationship between economic crisis and public health is far from clear. While some studies point to a negative impact (Cutler et al., 2002), others suggest that any rapid economic change, whether expansion or contraction, will have a negative effect (Ruhm, 2005), and still others indicate that economic crisis lowers mortality (Tapia Granados & Diez Roux, 2009) or has unclear or contradictory health effects (Khang, Lynch, & Kaplan, 2005; Stuckler et al., 2009). The contrasting public health responses to economic crisis during the 1990s in Russia and Cuba therefore provide a fascinating case study.

The Russian mortality crisis of the 1990s is well documented. After 1991, life expectancy at birth for men dropped drastically until it was a mere 59 years. Life expectancy for women still reached 72 years in 2002, leading to a spectacular gender gap of thirteen years it was a mere 59 years. Life expectancy for women still reached 72

consumption, especially among working class men. After a short-lived anti-alcoholism campaign in the 1980s, alcohol consumption increased again. Estimates range from 12 to 15 l of pure ethanol per capita per year (Shkolnikov et al., 2004; WHO, 2004a). In practice, it was adult Russian males who consumed 90% of the alcohol, on average 160–180 half-liter bottles of vodka a year (Cockerham, 2000). This consumption predictably affected directly related causes of death, such as alcohol poisoning, alcoholic cardiomyopathy, and liver cirrhosis but also other causes, including infectious diseases and external causes. Pridemore, Tomkins, and Eckhardt (2010) estimates that alcohol consumption played a role in nearly one-third of all Russian deaths and nearly half of premature deaths among working-age Russian males. Nothing remotely similar occurred in Cuba. Instead, consumption levels rose slightly for spirits but decreased noticeably for beer, leading to a slight overall reduction in per capita alcohol consumption to around 3.8 l. Accordingly, there was little change in alcohol related causes of death after 1990 (WHO, 2004b).

In Cuba, initial effects of the crisis on public health were serious, although along different trajectories and nowhere near the level of the Russian mortality crisis. Deaths from infectious and parasitic diseases increased from 8.3 to 13.9 per 100,000 and from 23.0 to 50.7 per 100,000 for influenza and pneumonia (Garfield & Santana, 1997). The immunization rate declined, resulting in rising incidence of some diseases, including tuberculosis (Meso-Lago, 2005). All-cause mortality also increased slightly and average per-capita-calorie consumption per day fell from 2889 in 1989 to 1863 in 1993. The rate of newborns weighing less than 2500 g increased from 7.3% (1989) to 9% (1993), and between 1992 and 1994 more than 51,000 Cubans suffered in an epidemic of neuropathy, a rare disease
associated with vitamin deficiencies (Franco et al., 2008; Nayeri & López-Pardo, 2005). However, not all was negative: infant, and child mortality remained constant or improved slightly even during the worst years of the crisis and improved tangibly afterward. By 2002 morbidity rates in chicken pox, syphilis and acute diarrhea were lower than in 1989 (Meso-Lago, 2005; Sixto, 2001). Life expectancy increased consistently with only a temporary deceleration of the trend during crisis years.

Interpretations of these data differ. While some scholars highlight the overall stability of public health data in the face of adverse conditions (Garfield & Santana, 1997; Nayeri & López-Pardo, 2005), others see the shortcomings as proof of a failed political system (Meso-Lago, 2005; Sixto, 2001). Probably the most interesting—and provocative—data were published by Franco et al. (2007, 2008), who saw the crisis as a motor of health improvements. The decrease in calorie intake coupled with increased physical activity provoked a marked reduction in obesity (BMI ≥ 30). Rates dropped from 11.5% (1982) to 5.4% (1994) in Havana, and from 14.3% (1990) to 7.2% (1995) in Cienfuegos. Levels rose again some years later, but by then positive mortality effects were visible. Between 1997 and 2002 age-adjusted diabetes mortality decreased by 51%, back to the levels of the early 1980s. Similarly, age-adjusted stroke mortality decreased by 35% and age-adjusted overall mortality by 18%. Together with Nayeri and López-Pardo (2005), Franco et al. have argued that a combination of country-wide weight loss, more physical exercise and nutritious home-grown vegetables produced healthier lifestyles.

Irrespective of details, the general picture is clear enough: in the early twenty-first century, the average Cuban male newborn could look forward to 17 more years of life than his Russian peer, up from 12.5 years a decade earlier. What is less clear is why these two societies reacted so differently. Why did Cubans, traditional producers of rum, not turn to drinking? Why did Russians, traditional holders of dachas, not develop active, wholesome lifestyles? Clearly, there was crucial context to both reactions, calling for more analysis into what differentiated the two countries.

Caution is needed for this analysis. The sheer difference of scale may call into question the comparability of an island of 11 million people and a multi-ethnic empire of 140 million. There are obvious differences of culture, mentality, historical background and geography. Understandably public health in Cuba and Russia is more commonly compared to that in neighboring countries. However, what these studies gain in cultural coherence they lose in economic comparability. Cubans and Mexicans may speak the same language and swim in the same ocean, but they did not experience remotely similar economic conditions after 1989. Cubans and Russians did and their contrasting health responses beg explanation.

Data and methods

This paper aims at insights into the relationship between economic crisis and public health not by generating new but by comparing and juxta-posing existing data. In the interest of comparability, standardized data from UN institutions have been used where available, notably mortality rates from the WHO Mortality Database, which comprises deaths registered in national registration systems in standard albeit not age-standardized format, a negligible weakness in view of the similar age structure of the two countries (see Table 1). Other series used include the Main Aggregates Database for GDP growth rates, ILO data for unemployment, and the UN Population Division data for life expectancy, general population and migration rates. When no such data were available for relevant factors, similar qualitative or quantitative information has been sought as far as possible in surveys and studies on both countries.

### Table 1

<table>
<thead>
<tr>
<th>Age brackets, 1995.</th>
<th>0–4 years</th>
<th>5–14 years</th>
<th>15–59 years</th>
<th>60+ years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cuba</td>
<td>7.1%</td>
<td>15.2%</td>
<td>65.2%</td>
<td>12.6%</td>
</tr>
<tr>
<td>Russia</td>
<td>5.4%</td>
<td>15.9%</td>
<td>62.0%</td>
<td>16.7%</td>
</tr>
</tbody>
</table>

Data Source: UN Population Division, World Population Prospects.

GDP growth rates have been chosen as measurement of purely economic difficulties, and unemployment rates as indicators of how these economic data translated into people’s lives. Furthermore, sporadic information about the gini-coefficient has been used to document the transmission of economic into social difficulties. Cause-specific mortality rates for cardiovascular diseases, diabetes and external causes have been selected because these were most responsible for the mortality differences in Russia and Cuba or, in the case of diabetes, most indicative of specific reactions to the crisis.

As pertinent social factors, the paper analyzes the impact of diet, stress, lifestyle aspects such as alcohol consumption and physical exercise, social capital and a general appreciation of public health in society. These are the typical risk factors of the cause-specific mortalities in question. They also reflect the social determinants of health identified by the WHO Commission on Social Determinants of Health and other publications (WHO, 2008; Wilkinson & Marmot, 2003).

### Results

The degree of economic breakdown reached similar proportions in Cuba and Russia.

After 1989 the Soviet Bloc and its economic system collapsed. Between 1992 and 1996 industrial and agricultural production in Russia plummeted to less than half the previous levels, and from 1991 to 1995 the consumption of goods and services declined by a third (Phillips, 2000). In January 1992, encouraged by Western economists, the Soviet government embraced a program of “shock therapy” as a strategy for creating a market economy. Based on neoliberal concepts of minimizing the role of government, numerous social programs and subsidies were canceled and prices liberalized (Arbatov, 2001).

For Cuba, the collapse of the Soviet bloc ended a system of preferential trade, which had supplied 85% of its imports. The economic shock was exacerbated by several acts of the US Congress that tightened the already existing embargo. The Torricelli Bill (1992) and Helms-Burton Act (1996) prohibited all trade between US companies and Cuba, 70% of which had been in food and medicines, and put heavy pressure on third countries also to suspend all trade (United States Congress, 1992, 1996; Murphy, 1999; Nayeri & López-Pardo, 2005). Between 1990 and 1993, imports fell to a quarter of 1989 levels. Most painfully, oil imports were halved, leading to fuel shortages. Economic output declined rapidly, and by 1993 Cuban GDP had shrunken to 65.2% of its 1989 size (Hoffmann, 1996; Meso-Lago, 2005; Pérez-López, 2002; Fig. 1).

In both countries, GDP shrank by about 10% per year between 1991 and 1995, with cumulatively devastating effects for all economic activity. In both countries people faced rising unemployment, overall impoverishment and profound social disruption. Modest recovery followed but the 1997/1998 Asian financial crisis and the ensuing global recession caused new drops in growth rates, particularly for Russia where, in early 1998, the average real wage was a mere 40% of its pre-reform level and still falling (Mikhalev, 2001). By 2001, however, the immediate crisis was over in both countries. Subsequent long-term effects would require more detailed and issue-specific analysis than is possible in this paper, so that considerations here will focus on the years 1990–2002.
Although similar in depth the crisis differed in character in both countries. For Cuba it meant a fundamental absolute shortage of products and services, whereas for Russia, it represented a fundamental change of rules that determined access to products and services that, in principle, continued to exist. In both Cuba and Russia, the breakdown of economic activity brought the risk of unemployment, traumatic for people who had never known a system without job security and where employment frequently came with additional benefits such as meals, child care or health services. But as far as can be deduced from incomplete ILO data (available from 1992 for Russia and 1995 for Cuba) the development and distribution of unemployment differed substantially. Cuban unemployment reached high rates the early 1990s and then declined to a low 2%. In Russia, unemployment peaked in 1998 and remained above 7% even after recovery. The data also indicate remarkable gender differences: while in Russia unemployment affected men and women to virtually identical degrees, Cuban women suffered a decidedly larger burden than men (Fig. 2).

These data reflect different political strategies. The Cuban authorities tried to safeguard the pre-crisis system as much as possible, finding ways to prevent or redirect excess work force. Meso-Lago (2005) lists governmental labor-absorbing programs, including labor-intensive agriculture and various study programs, designed to obscure 5%–28% effective unemployment, which collectively employed roughly 750,000 people. By contrast, the Russian administration left unemployment to market forces. Unemployment benefits were low, on average only 10% of the average wage and only one-third of the subsistence minimum in 1994 (Mikhalev, 2001). Unemployment, therefore, entailed the prospect not only of profound loss of status but also of destitution, making it a formidable threat.

Unemployment was only part of a larger picture of increasing social polarization. The wealth ratio of the most affluent to the poorest decile in Russia jumped from 3.4 in 1991 to 13.3 in 1998. Estimates about the gini-coefficient vary but suggest growing inequality from 0.26 in 1990 to between 0.409 and 0.49 in 1993. Real inequality was probably higher due to systemic undercounting of illegal economic activity (Mikhalev, 2001). Inequality in Cuba also increased. Meso-Lago (2005) estimates that the gini-coefficient rose from 0.22 in 1986 to 0.407 in 1999 and that the income ratio of...
the poorest quintile declined from 11.3% to 4.3% while that of the richest quintile rose from 33.8% to 58.1%. The legalization of the dollar divided the population into those with and those without access to dollars and thereby to foreign currency stores. This privileged people who worked in the growing tourist sector or who had relatives in the USA (Hearn, 2008).

The crisis affected two societies that had similar age structures but were moving along contrary health trends (Table 1; Fig. 3). After rising for half a century, life expectancy in the Soviet Union had begun a long decline in the 1960s, interrupted only by a short-lived improvement in the 1980s. Meanwhile, life expectancy in Cuba increased steadily. The crisis experience, therefore, strengthened pre-existing developments. However, while contextualizing the crisis events, these five-year averages gloss over the mortality developments, which show that more than business as usual was at work. Clearly, the economic crisis had a dramatic effect on all-cause mortality in Russia but remained virtually invisible in Cuba (Fig. 4).

These mortality differences resulted from several causes, above all cardiovascular disease, the dominant cause of death in both countries. In Russia, cardiovascular mortality showed a distinct upsurge during the crisis years and subsequent consolidation at a higher level after 1998. Cuban data during the same period were far lower and remarkably stable (Fig. 5). Presumably, these developments were tied to the relevant risk factors: poor diet, obesity, lack of physical exercise, stress and poor hygiene, which must have affected Russians significantly more than Cubans.

The importance of nutrition, obesity and physical exercise is underscored by diabetes mortality rates. The scale of the numbers precludes a decisive impact on overall mortality but their differences point to different interactions between crisis and public health: a marked fall in diabetes mortality rates in Cuba just after crisis years contrasts with rising rates in Russia. Apparently, the crisis had some positive effect on diet and lifestyle in Cuba but failed to do so in Russia (Fig. 6).

Probably the most spectacular development for Russian men and, in that context, the most impressive contrast to Russian women and to Cubans, male and female, concerned mortality from external causes, that is, deaths from accidents and violence, notably suicide and homicide (Fig. 7).
Fig. 5. Mortality from diseases of the circulatory system, ICD 9 25–30/ICD 10 I100–I199 (Deaths per 100,000 people). Data Source: the WHO Mortality Database.

Fig. 6. Mortality from diabetes mellitus, ICD 9 181/ICD 10 E10–E14 (Deaths per 100,000 people). Data Source: the WHO Mortality Database.

Fig. 7. External causes; ICD 9 47–58/ICD 10 V01–Y89 (Deaths per 100,000 people). Data Source: the WHO Mortality Database.
Drastic increases in accidents and violent deaths suggest a breakdown of precautionary mechanisms in the workplace and on the streets, of interpersonal relationships, of individual and collective care, trust and cohesion. This suggests a society failing to protect its members from avoidable dangers and from themselves.

WHO data imply that social life in Cuba continued fairly unaffected, but that Russian women experienced tangible social stress and Russian men suffered social collapse. This finding is corroborated by data on homicide and suicide, although they are available for Cuba only from 1992 onwards. Clearly, for all the hardship suffered, Cubans must have found effective ways of coping while Russian men were defenseless victims of changing circumstances (Figs. 8 and 9).

There are obvious interactions between risk factors. For instance, numerous victims and/or perpetrators of were drunk at the time of the murder, pointing “to the relationship between mortality, alcohol, and social stress” (Shkolnikov et al., 2001; WHO, 2004a, 2004b).

The discussion of these differences focuses on circumstances that contextualize the data: health care traditions, diet, stress, lifestyles and social conditions. In the process, discussions of economic crises highlight how seemingly unrelated factors in people's lives come together and collectively affect their health.

Discussion

Health care

Theoretically, public health should have enjoyed a similar status in both countries. Both the Soviet Union and Cuba had endorsed a Socialist commitment to universal health care and had enacted impressive reforms after their respective revolutions. (Casal et al., 2002; Field, 2000; Shkolnikov et al., 2004). But by the 1960s, health took drastically different places in the overall political value systems. In Cuba, health was adopted as an arena for national prestige, and public health data were treated as yardsticks of political success (Cooper, Kennelly, & Orduñez-Garcia, 2006; Feinsilver, 1993). Meanwhile, Soviet priorities shifted to other political sectors and the share of the national budget dedicated to health began shrinking until it suffered serious and “persistent
under-funding" (Cockerham, 2000; Kingkade, 1992, 253). The quality of medical care depended on rank in a stratified society, leaving about half the population with sub-standard services (Field, 2000) and public health was not considered a field of inter-ideological competition. These different contexts explain why universal access to health care remained a key goal in official Cuban policies during the crisis while Russian policies prioritized perceived market efficiency.

In Russia, privatization measures after 1990 tied access to health care to people’s ability to pay and to reach doctors’ offices, shifting privileges to the wealthy and urban. These changes meant that the general level of services, already insufficient before the crisis, further declined at a moment of increasing challenges (Kingkade, 1992, Leon & Shkolnikov, 1998; Shkolnikov et al., 2004). By contrast, weaknesses of the health system in Cuba derived from disruptions of material provisions, particularly drugs and technical equipment, imports of which declined sharply from $227.3 million (1989) to $67 million (1993), and recovered only partly to $112 million (1997) (Garfield & Santana, 1997). Fuel shortages affected ambulances; disruptions in electricity and running water restricted laboratory procedures and clinical operations, as did shortages in supplies, ranging from textbooks to soap (PAHO, 1998; Sixto, 2001).

The greatest advances toward these deficiencies were made by increasing miserocracy: between 1990 and 2003 health care personnel increased by 36%, including 76% for doctors alone. Sixto (2001) and Meso-Lago (2005) have criticized this strategy for inflating an already overstuffed medical system with funds, which would have been better invested in safeguarding drinking water. Indeed, shortages of chlorine reduced the percentage of the population with access to chlorinated water from 98% (1988) to 26% (1994) and mortality from diarrheal diseases increased from 2.7 to 6.8 per 100,000 (Garfield & Santana, 1997). On the other hand, the WHO credits the fact that 99.8% of all children attended early child services, with people dying of causes that were relatively insensitive to medical care.” (Wallberg et al., 1998, 317). Clearly, other factors were more decisive.

Diet

In both countries getting sufficient food was a serious problem for many people, although, again, for different reasons. In Cuba, it was a problem of availability as food imports collapsed virtually overnight. Agricultural productivity also collapsed between 1989 and 1992 as imports of animal feed, fertilizers and agricultural fuels fell by, respectively, 72%, 81% and 92% (Meso-Lago, 1996, 2005; Altieri et al., 1999). Food shortages were met by intensified rationing. In January 1990, rising bread prices and queues in front of bakeries marked the difficulty of the situation (Deere, 1991; Rodríguez-Ojea et al., 2002). In 1997/1999, 17% of the population were recorded as undernourished, up from 8% in 1990/1992. Impressively, however, by 2000/2002 the proportion had again declined to 3% (UNDP, 2002, 2005).

In Russia, food existed but poverty left numerous people without food security. Mikhailov (2001) showed that in 1994 the percentage of people unable to purchase a subsistence minimum consumer basket ranged from 17% in Magnitogorsk City to 72.4% in the agricultural Astrakhan Oblast. Another survey reported some 40% of the Russian population as unable to survive on their income (Robertson, 1998). Apparently, many people managed only because they grew food for themselves in family gardens, often in minute plots of 0.04–0.5 ha. Apparently the number of urban families with household plots doubled from the late 1980s to over 22 million by 1995. Collectively, they produced an impressive 88% of potatoes, 80% of vegetables, 43% of meat and 39% of milk while they owned no more than 4% of all agricultural land. Nevertheless, the Russian diet was still considered deficient in vegetables and fresh fruit (Robertson, 1998; Shmelov et al., 2001).

In Cuba, there was no tradition of gardening, and household farming began as individual responses to desperate need. But government policies took an increasingly important role by providing land, training, counsel, tools, biofertilizers and by encouraging grassroots activities. A crucial stimulus came from the legalization of farmers’ markets in 1994 (temporarily already allowed in the 1980s). Soon tens of thousands of people took to gardening (Altieri et al., 1999; Bourque & Cañizares, 2005; Hoffmann, 1996; Koont, 2009; Murphy, 1999). Nevertheless, though the precise significance for general nutrition is difficult to establish it appears limited. Wright (2009) estimates that urban farmers never provided more than 5% of food consumed. However, the program is credited with increasing general intake in fresh vegetables and fruit, diversifying the diet of ordinary Cubans (Koont, 2009).

In both countries, therefore, household farming was an important coping strategy during the crisis but its overall significance differed: In quantitative terms, its impact seems more important in Russia, while its qualitative value appears higher in Cuba, though numbers are estimates and must be accepted with some reservation. In both countries household agriculture entailed fringe benefits: stimulating self-reliance, cooperation, improving environmental aesthetics and mental health (Altieri et al., 1999; Robertson, 1998). But household farmers in Russia were largely on their own. No government policy provided seeds, land, counsel or a framework which turned individual effort into a group activity or a prestigious scientific endeavor. This and the framework of limited access—instead of availability—of food, meant that household agriculture carried potentially derogatory social connotations it did not have in Cuba.

Lifestyle: exercise/alcohol

Oil shortages in Cuba also forced adaptations to low-fuel mobility. Among other measures authorities organized the distribution of more than a million bicycles, partly imported from China (Deere, 1991). This new need to cycle or walk to work reduced the
number of sedentary men, doing no exercise at all, from 62% to 26.7%, that of women from 78% to 39.8% (Rodríguez-Ojea et al., 2002). Clearly, this was a significant move toward a healthier lifestyle, which contributed to the reduction of obesity and diabetes noted above. There was no equivalent in Russia, where fuel shortages were not among the central problems. Instead, lifestyle changes tended to be negative, involving, above all, an increase in alcohol consumption with its devastating health effects. This change affected overwhelmingly Russian men, pointing to an interplay of cultural and culturally founded gender differences.

While originally alcohol had formed part of holiday rituals, in modern times heavy drinking gradually expanded into a year-round activity associated with socializing and male group behavior. Increasingly, a man was expected to "drink as much as the others in his drinking party even if he [did] not have the desire to do so" (Cockerham, 2000, 1322). This development was spurred by political expediency. Under both Tsarist and Communist regimes government held a monopoly on alcohol production and sale, resulting in substantial state revenues. Besides, alcohol constituted "one of the few goods for which supply could meet demand" (Walberg et al., 1998). Even before the crisis, this particular parameter of lifestyle opportunities had contributed to the fall in life expectancies. In Cuba, the population originated from Southern European cultures, which discouraged drunkenness, and the macrofinancial benefit of alcohol production came from exportation rather than domestic consumption. Alcoholism made neither cultural nor economic sense.

The self-destructive increase in alcohol consumption among Russian men appears to have resulted from a fateful combination of factors, which made alcohol the prime choice of stress relief in an exceptionally stressful situation. Soviet ideology had encouraged male employment, partly to ease the integration of women into Communism. However, traditional gender roles within families had not been targeted and had remained largely unchanged effectively leaving the household as a woman's domain. The breakdown of Communism discredited its gender policies, leading to a renewed emphasis on the traditional role of men as "natural" providers of the family. This image, which placed increased expectations on men, was relentlessly reinforced by commercials for "male" products such as cigarettes, which came to replace Soviet propaganda as orientation for social models. In contrast to women, who retained respectability through their domestic role when unemployed, men had virtually no alternative field of respectable gender identity and faced seeming redundancy in both domestic and labor spheres (Ashwiin & Lytkina, 2004; Kay & Kostenko, 2006; Pietilä & Rytkönen, 2008a, 2008b). In this context, the comparable male and female unemployment data were at odds with cultural expectations and underscored the men's perceived failure as "real men." In this situation, alcohol provided temporary relief from reality through drunkenness, and the connotations of drinking as a "male" activity also offered gender reassurance. Besides, alcohol was a prerequisite to social support, since meeting male friends culturally required drinking.

In Cuba, traditional gender models had also survived government attempts to spur gender equality, which, in this case, included housework. Since these policies were never discredited, the crisis created a mirror image of the gender inconsistency in Russia: contrary to an official insistence on gender equality unemployment disproportionately affected women, and those who did find work, frequently did so in "female" jobs in the growing tourist industry as maids, waitresses, room providers or prostitutes (Toro-Morn, Roschelle, & Facio, 2002). In contrast to Russian men, Cuban women were disadvantaged in economic terms but could reconnect to traditional gender roles as alternative sources of identity and self-worth. This situation seems to have given women resilience against the stress of unemployment while protecting men from the multiple blows experienced by their fellow males in Russia. These gendered experiences were part of a larger picture of different experiences of stress.

**Socio-economic disruption — social resilience — social capital**

The idea that abrupt socio-economic change is harmful to health dates back at least to the nineteenth century and Émile Durkheim. The connection is borne out by late twentieth-century Russian data, which show that reductions in life expectancy were highest not in the most impoverished but in the relatively wealthiest areas and those that, in 1993—1994, experienced the highest labor turnover and the highest crime rate. These factors were mutually reinforcing: increased crime rates could contribute to mortality rates through homicide but would also inhibit the growth of small enterprises and thereby increase job insecurity and economic decline, which, in turn, would encourage crime (Walberg et al., 1998). Thus, the different elements of social disruption interacted to create a fatal downward spiral, eroding social trust and equality, declines in both of which have been shown to affect public health negatively (Marmot, 2004; Navarro, 2002). A combination of factors appears to have prevented a similar spiral in Cuba. The employment-securing measures probably retarded economic recovery, but by preventing or cushioning unemployment and by increasing an already high level of education — in itself known to have life-extending qualities (Kolata, 2007) — they probably prevented a mortality increase in the age group concerned, that is, they saved lives. Further, separating essential services such as healthcare and education from income had an equalizing effect. Finally, a strong basis of social capital helped.

Social capital describes the value of collective interpersonal relationship, often defined as the level of social trust and of civic engagement. Both have been shown to have a strong inverse correlation with mortality (Kawachi, Kennedy, Lochner, & Prothrow-Stith, 1997). No reliable statistics have been found for Russia or Cuba but available qualitative information allows some informed speculation. Studies of Cuba consistently show a high level of social capital, as individuals benefit from quasi automatic integration into several layers of social networks, which provide material and psychological support. Families, neighborhoods, various local, municipal, party and special interest associations, NGOs as well as religious affiliations in their Roman Catholic, santería and mixed forms coexist in ambivalent mixtures of competition and mutual reinforcement. The crisis appears to have strengthened and connected rather than weakened the various groups as the state sought to embrace, and thereby influence and control, an increasing number of local initiatives while local NGO actors likewise tried to maximize the benefits of their activities by engaging state support (Hearn, 2008). Kummels (1996) has described how informal cooperation between party officials and black market organizers could develop into illicit symbiotic relationships. Meanwhile government distributions of food and other everyday products, which often required time-consuming queuing, or inside information about the arrival of scarce goods, depended on a second system of self-organized procurement and re-distribution within neighborhoods. Thus, it seems that the material well-being of the population depended only partly on government regulations and to a similar degree on — mainly female — networks of informal welfare that mixed socialist ethics of equity with capitalist entrepreneurship, religious charity and motherly humanitarism. This high level of social interaction may explain why the crisis hardly affected suicide and homicide rates in Cuba. While the overall effect on public health was clearly positive, this dense network of contact involved a distinct underside by facilitating political control and repression. This constant source of psycho-social stress is difficult to quantify but appears to have intensified after...
provides well-connected government of degenerated into an open invitation to plunder, readily accepted by were installed without political control mechanisms, the system the new situation within Russian society. One of the most dis-
which social capital depends on government measures is disputed increased cohesion as reaction to the crisis. Although the degree to which social capital depends on government measures is disputed (Field, 2003; Kawachi et al., 1997), it seems clear that public policy provides — at the least — an influential framework. At a time when “shock therapy” insisted on the omnipotence of the market, traditional government-organized cooperation supposedly appeared counterproductive and outdated. The old Soviet system had, after all, simply collapsed making it difficult to see how Socialist-style collective action would be better at addressing the ills of the crisis it had caused than Capitalist individualism.

Moreover, in stark contrast to Cuba, the Russian crisis could not be perceived as an external challenge to be met by a united front. If Cubans found stress relief in blaming the crisis on Soviet and US policies, no such option was open to Russians. On the contrary, social cohesion was eroded by those most skillful at manipulating the new situation within Russian society. One of the most disturbing aspects of the transition in Russia was the dramatic rise in crime and corruption. As the possibilities of a market economy were installed without political control mechanisms, the system degenerated into an open invitation to plunder, readily accepted by well-connected government officials, new oligarchs, bankers and mafia-type gangsters. Government reports from 1994 indicated that 70%—80% of banks as well as state and private companies made “payments to racketeers and corrupt officials” (Glikina, Grigoriev, & Yakobidze, 2001, 238).

Fear of emerging crime in the 1990s may have been inflamed by “lurid tales in a newly liberated Press” (Galeotti 2000, 139), itself a source of social stress, but the growing incidence was real enough and exacerbated societal fragmentation. Arbatov (2001) has described how a combination of day-to-day efforts for survival, the costs involved in going out and the rise in crime encouraged a lifestyle of isolation. Meanwhile, shock therapy put regular contact to distant friends and relatives via planes or even phone calls out of reach for millions. In the face of government indifference, incompetence and corruption, and few prospects for improvement, a growing number of people were left with no feeling of control over their lives and with poor self-esteem (Shkolnikov et al., 2001). This political-economic climate, which valued competitiveness while simultaneously withdrawing social support systems, systematically undermined people’s resilience to crisis pressures.

### Conclusions

There are many reasons why similar economic crises led to drastically different public health outcomes of economic crisis in Russia and in Cuba. These include different long-term attitudes toward health within governments, different lifestyle reactions among the populations and different degrees of social disintegration. The short-term factors interacted in very obvious ways: social breakdown affected stress levels and gender roles, which affected alcohol consumption, which in turn affected nutrient absorption of food as well as further social breakdown. These factors were simultaneously rooted in long-term conditions. The society that prioritized public health before the crisis continued to do so afterward and made decisions accordingly. Similarly, the society that had encouraged excessive drug consumption turned to alcohol in reaction to crisis conditions. In this sense, the crisis to some extent reinforced pre-existing values and developments.

How they did so was, however, in part determined by the specifics of the crisis. It appears to have been easier to develop collective coping strategies for crisis conditions where these seemed to derive from external developments, and where internal structures and belief systems thus were left largely intact, albeit under sufficient pressure to force substantial change. By contrast, the crisis of apparently internal origin undermined the building blocks of society and thus existing resources of resilience. In both cases the crisis process provoked profound changes. Thus, Russian society became more violent and both Russian and Cuban society became more unequal.

In sum, these findings suggest that the effect of economic crisis on health is determined by a combination of long- and short-term cultural, economic and political factors and the ways they interact with the specific circumstances. In this perspective, Cuba was geographically, culturally, socially and politically better equipped to cope with crisis stresses than Russia, and it faced what could be constructed as relatively the “better” crisis. Cuba’s crisis was hardly easy or romantic, but nor was it mortal.

There may be additional factors, whose impact is still insuffi-
ciently understood. Psychological disposition is a case in point. A large body of research indicates that happiness does not cure illness but helps maintain health and prolong life in healthy populations (Veenhoven, 2008). Happiness, in turn, is affected by many of the same circumstances that determine health, such as social frag-
mentation or support. But other factors beyond human control, such as climate, may also play a significant role (Rehdanz & Maddison, 2003).

However, while societies have to live with the climate of their geographic situation, the contrasting cases of Cuba and Russia demonstrate that economic crises can but need not turn into crises of public health and that political decisions go far to explain the difference. Clearly, long-term policies that prioritize public health, societal values that encourage interpersonal cooperation and support, a general commitment to egalitarianism that provides broad access to food, education and health care and that facilitates an even distribution of the burdens of economic shock, are all beneficial in times of economic crisis. But then, they are beneficial at any time. Crisis management may in many ways be just part of the management of everyday challenges.

### Acknowledgments

I would like to thank Anne Hardy and the anonymous reviewers for most helpful comments on an earlier draft of the paper.

### Table 2

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cuba</td>
<td>-2.2</td>
<td>-3.0</td>
</tr>
<tr>
<td>Russia</td>
<td>3.0</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Data Source: UN Population Division, The 2008 Revision Population Database.
References
Phillips, A. (2000). The political economy of Russia: transition or condition? In M. Bowker, & C. Ross (Eds.), Russia after the cold war (pp. 52–78). Edinburgh: Pearson Educated Ltd.