

# Global social climate: Trends and challenges for policy\*

# 2

## Main findings

- Recent survey data indicate that there has been a general global decline in life satisfaction and historical data show that this decline is unprecedented. Compared with the data from the 1980s and the 1990s, developed economies in Western Europe and economies in Central and Eastern Europe show some of the most severe declines in life satisfaction.
- Confidence in government has also declined, as have perceptions that policies are fair or lead to a better future. These trends are most common among advanced economies. Among Western European countries, there is a perception of growing political extremism and social discontent. Perceptions of unfairness have increased in Latin America and remain high in Asia and, to a lesser extent, sub-Saharan Africa.
- There have been documented cases of social unrest related to the financial and economic crisis in at least 25 countries. These cases have taken the form of protest against governments' crisis responses and austerity measures aimed at repairing government balance sheets, protests against employers, and violent clashes between the government and protesters. As governments try to contain the fallout from the crisis, the social contract between State and citizen has been put to the test.
- Empirical analysis suggests that higher unemployment and income inequalities are key factors behind growing social unrest. These two factors are more important in determining the risk of social unrest than falling GDP per se. These findings stress the importance of crisis responses based on job-rich, balanced strategies, in line with what is recommended in the Global Jobs Pact.

\* Excellent research assistance by Phillip C. Bastian is gratefully acknowledged.

- The longer-term objective should be to reduce income inequalities while promoting efficiency, notably through financial reforms (see Chapter 5). Elevated unemployment resulting from the crisis has caused the bottom of the earnings distribution to fall off relative to the median, which in turn has increased inequality in earnings. It is important to address rising inequality in order to restore the global social health. And in order to reduce the growing income inequality, emphasis should be placed on better redistributive policies, especially progressive taxation and better social protection.

## Introduction

In the wake of the financial and economic crisis, the global social climate faces numerous risks, in particular from the elevated unemployment rates and sluggish job growth. As Chapter 1 has documented, despite the economic recovery that started in the second half of 2009, employment growth is expected to remain sluggish, especially when the growing working-age population is taken into consideration. The ILO's mission statement says that work is central to people's well-being. In addition to providing income, it paves the way for broader social and economic development, strengthening individuals, their families and communities. Hence, it should not come as a surprise that employment loss is one of the most important risks facing the global social climate. The crisis has also had a disproportionate impact on low-income groups, which had not benefited much from the expansionary period. Thus, job losses combined with growing income inequalities pose a threat to the social climate.<sup>1</sup>

However, the discussion of social climate is fraught with problems, the foremost being that there is no one indicator of social climate. For example, decline in life satisfaction, decline in job satisfaction and increased perception of unfairness are some of the many indicators of social climate but there are many others indicative of social health. Most of these variables tend to be interlinked, but taken together they provide an overall picture of social climate. Meanwhile, social unrest in the form of protests against the government is a visible manifestation of an unhealthy social climate. For the purpose of this chapter, social unrest is defined as protest against governments' crisis responses and austerity measures aimed at repairing government balance sheets, protests against employers, and violent clashes between government and protestors. The primary objective of this chapter is to assess empirically the risks and challenges facing the global social climate by exploiting recent data covering several social indicators.

Section A documents the trends in various social indicators in over 150 countries since the start of the crisis. The indicators include perceptions of unfairness, trust in government and its ability to handle the crisis, perception of one's standard of living getting better, life satisfaction, job satisfaction and a society's endowment of trust and happiness (Parvin, 1973; Jenkins, 1983; Jenkins and Wallace, 1996; Oswald, 1997; Clark et al., 2008). Unlike all other indicators, the data on trust and happiness are pre-crisis. Section B examines the extent to which these indicators are related to labour market developments as well as crisis responses, in line

1. For more on the threat facing the global social climate, see: Economist Intelligence Unit, 2010; European Commission, 2010; United Nations, 2009; OECD, (forthcoming).

with earlier studies (Lehman-Wilzig and Ungar, 1985; Walton and Ragin, 1990; Clark and Oswald, 1994; Auvinen, 1996; Oswald, 1997; Bohrer and Tan, 2000; Clark et al., 2004; Norris et al., 2005; Clark, 2006). The concluding section of the chapter calls for a job-rich recovery in line with the Global Jobs Pact (GJP) as the key to reducing the risks facing the social climate.

## A. Social climate since the start of the crisis

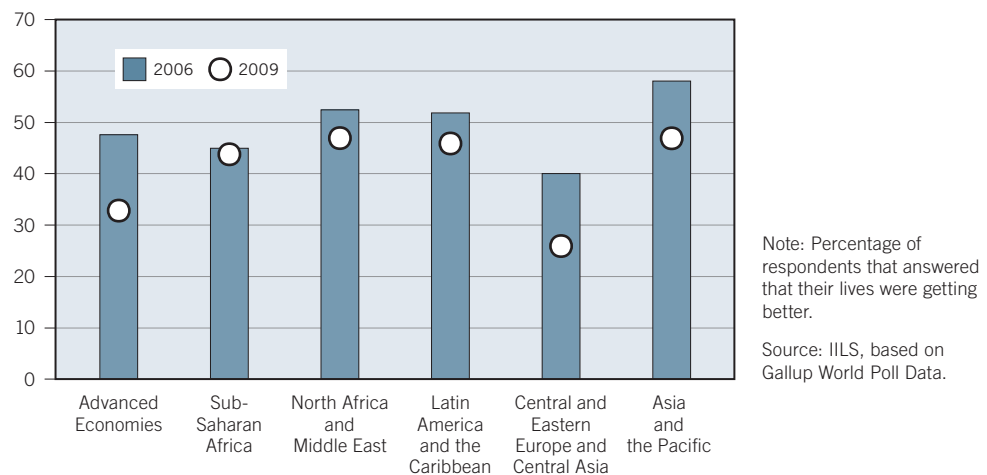
A global survey of over 150 countries and territories has been used to assess social perceptions about the crisis. The indicators collected from the survey are sparse and not necessarily related. However, they all point towards a picture of heightened socio-economic insecurity around the world, although with considerable cross-country differences. So far, the sense of insecurity has not led to widespread collective protest or social unrest.

### Pessimism about quality of life has increased since the start of the crisis...

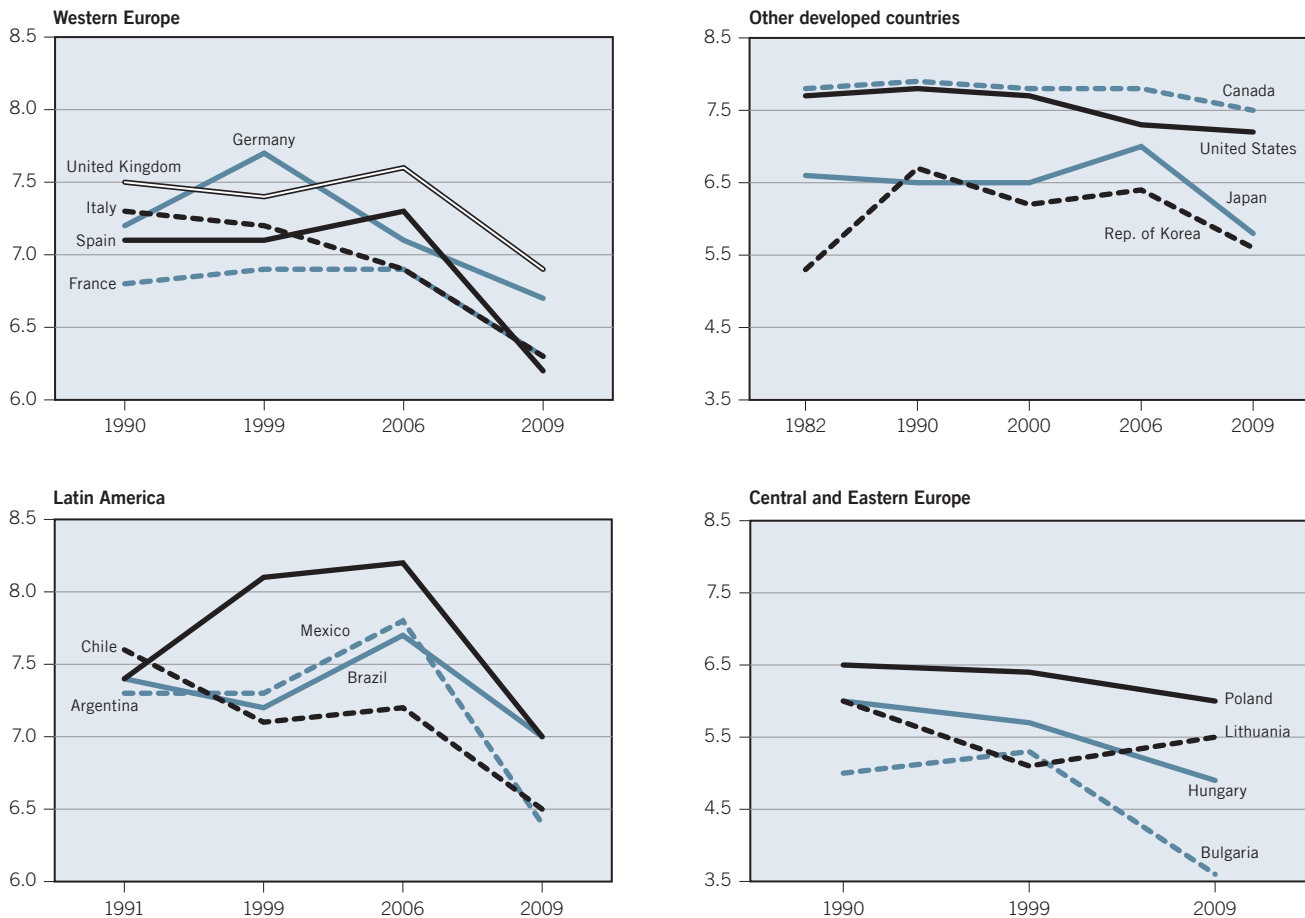
As economic insecurity has risen, people are becoming increasingly pessimistic. Many report that they do not expect their standard living to be better in five years' time. This is significant, as it suggests that people expect the fallout from the crisis to continue well into the future, even though output has recovered in many countries.

For example, in 2009 only 32 per cent of respondents in advanced economies said that their standard of living was getting better, down from 48 per cent in 2006 (figure 2.1). Central and Eastern Europe and Central Asia saw the biggest decline in people's perceived standard of living – in 2009 only 25 per cent of people in these countries said that their standard of living was getting better, down from 40 per cent in 2006. Other parts of the world also saw a decline in people's perception that their standard of living was getting better. The general global trend shows that people are not happy with the direction their country has been taking in the past two years.

**Figure 2.1 Perceived improvement in standard of living, 2009 vs. 2006**



**Figure 2.2 General global decline in life satisfaction after the crisis**



Note: Selected countries based on availability of historical data.

Respondents were asked to rank from 0 to 10 how satisfied they are with their life. Mean values for each survey year are presented in the figure. Surveys were conducted with gaps of several years, ranging from five to ten years.

Source: ILS based on World Values Survey and Gallup World Poll Data.

This decline is unprecedented in the historical data (see figure 2.2). Among Western European countries, Italy and Spain have seen the sharpest declines in people's satisfaction with their lives. The decline in Spain was particularly severe, reflecting the dramatic change in the Spanish economy between 2006, when the country was enjoying rapid growth, and 2009, when the bubble burst, causing extremely high unemployment.

Among other developed economies, Japan has seen the most severe decline in life satisfaction. Countries in Latin America and in Central and Eastern Europe have also seen sharp declines in people's satisfaction with their lives. Argentina and Mexico have seen some of the most severe declines, although this may reflect other recent political developments. Meanwhile, Bulgaria and Hungary show the sharpest reduction in people's satisfaction with their lives among Eastern European countries.

Furthermore, among advanced economies, people are worried that their children's future is not as secure as they would like it to be. When asked whether children have the opportunity to learn and grow in their country, a smaller percentage of respondents in 2009 said yes than in 2005. For example, 73 per cent of Germans in 2009 said that their children had the opportunity to learn and

grow, down from 84 per cent in 2005.<sup>2</sup> Similarly, in the United Kingdom and the United States, around 80 per cent of people were optimistic about their children's future in 2009, down from 90 per cent in 2005.

People in Central and Eastern European Countries and Central Asia are also less optimistic about their children's future, again reflecting how hard these countries were hit during the crisis. However, other regions of the world show no discernible change in people's attitudes. In some cases, such as sub-Saharan Africa and North Africa and the Middle East, people are actually more optimistic about their children's future now than in 2005.

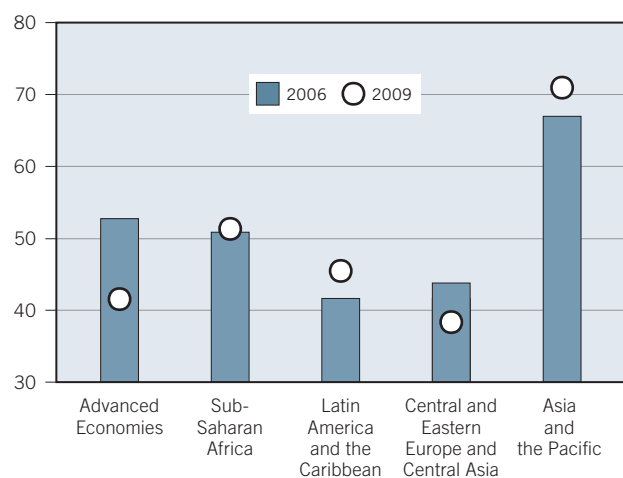
**...hand in hand with lower confidence in government, with the exception of Asia and Latin America...**

Lower confidence in government usually serves as an indicator of people's dissatisfaction towards the status quo. Among advanced countries, confidence in government declined from 52 per cent in 2006 to 41 per cent in 2009 (figure 2.3). Likewise, among countries in Central and Eastern Europe and Central Asia, confidence in government was down to 38 per cent in 2009 from 43 per cent in 2006. Not surprisingly, the recent bouts of social and political unrest have been primarily limited to advanced economies, especially those in the European Union. In other parts of the world, there has been either no discernible change or an actual increase in people's confidence in their governments.

**...and growing perceptions of unfairness among advanced economies, in Eastern Europe and Latin America.**

Rising economic insecurity and its manifestation in the form of social unrest is a more visible consequence of the financial and economic crisis of 2008–09, but there are other consequences that tend to be more latent and invisible. For example, people's perception of fairness has suffered in the last two years. When asked whether they could get ahead by working hard, a higher percentage of people said no in 2009 compared with 2006 (see figure 2.4). Among advanced economies and

**Figure 2.3 Lower confidence in government, especially among advanced and Central and Eastern European economies (percentages)**

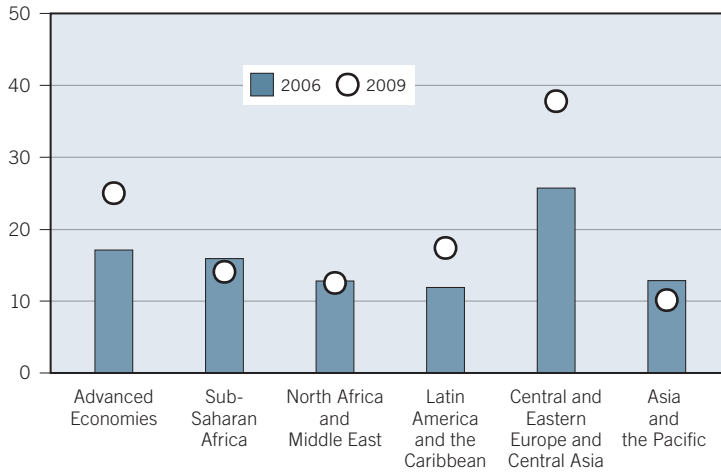


Note: North Africa and the Middle East not included because of small sample size.

Source: IILS, based on Gallup World Poll Data; surveys conducted in 2009.

2. Source: Gallup World Poll Data, 2010.

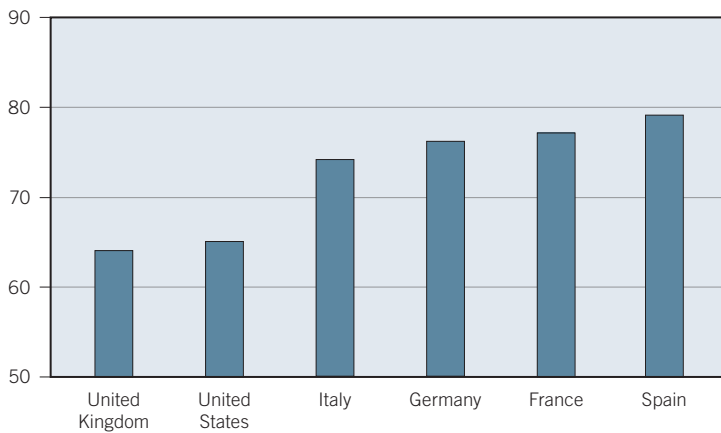
**Figure 2.4 Recent trend in perception of unfairness (percentages)**



Note: Survey respondents were asked: "Can people get ahead in this country by working hard or not?"; the chart shows percentage of respondents that said "no".

Source: IILS, based on Gallup World Poll Data.

**Figure 2.5 Public opposition to government bailouts of banks (percentages)**



Note: Data available only for France, Germany, Italy, Spain, the United Kingdom and the United States.

Selected countries based on data availability.

Source: Based on Harris Poll; surveys conducted in March, 2009.

countries in Eastern and Central Europe, perceptions of unfairness were already high in 2006, but in the aftermath of the crisis they increased even further. For example, in Greece and Italy, 40 per cent of the respondents to the World Gallup Poll reported that their countries were "unfair" in 2009. Similarly, in Lithuania and Ukraine, 64 and 58 per cent of the respondents, respectively, believed that their countries were unfair.

Among the advanced economies, people's perception of increased unfairness appears to stem largely from a general disapproval of government bailouts of banks and financial institutions (see figure 2.5). On the one hand, there is talk of reining in public spending and of fiscal consolidation while, on the other hand, there are news reports of banks and financial institutions handing out huge bonuses. Politicians, unions and media personalities seized upon this outrage to further their own causes, which intensified public anger.

**There have been some collective manifestations of social unrest associated with crisis responses...**

**38** There have been documented cases of unrest related to the financial and economic crisis in at least 25 countries (see table 2.1). These cases have taken the form of

protests against governments' crisis responses and austerity measures aimed at repairing government balance sheets, protests against employers, and violent clashes between government and protesters. As discussed before, the main source of this unrest is loss in employment and a decline in economic activity. Meanwhile, protests against employers stems from workers' dissatisfaction with pay cuts, benefit reductions, and mass lay-offs. But another cause is the fiscal consolidation aimed at repairing government balance sheets.

In order to weather the global economic slowdown, close to 2 per cent of world GDP was spent on fiscal stimulus measures (Khatiwada, 2009). Most countries engaged in expansionary fiscal and monetary policies. However, economic and financial activity still remains low, which in turn has reduced revenues. With declining revenues and elevated levels of public spending, public debt has skyrocketed, especially in advanced economies. Moody's, a rating agency for financial products, warned in March 2010 that even countries such as France, Germany, the United Kingdom and the United States could risk losing their high-grade credit rating (which keeps borrowing affordable) if they did not reduce their debt levels (Schneider, 2010). It is no surprise that in order to remain competitive in the global financial markets and continue enjoying access to international capital, many countries have announced austerity measures in the form of increase in taxes and/or reduction in spending. In the case of the European Union (EU), the very future of the euro as a multinational currency is dependent on whether countries can rein in their public spending.

The most prominent case of severe scaling back on spending is Greece. Austerity measures announced by the Government of Greece on 1 May 2010 include cuts in public sector salaries, scaling back of pensions for retired workers, a rise in value added tax from 21 per cent to 23 per cent, elimination of public sector annual bonuses amounting to two months' pay and a 10 per cent increase in taxes on fuel, tobacco and alcohol. To date the Government has made no announcements regarding rules for layoffs in the public sector (one out of three workers are employed in the Greek civil service). Overall, the increase in taxes and reduction in spending amounts to 10 per cent of Greece's GDP. By the most optimistic estimates, Greece is expected to be in recession until 2012. Greek workers and labour unions have taken to the streets to protest against the austerity measures, and in summer of 2010 the protests turned violent. The sacrifice asked of Greeks by their Government is severe, and will be a real test of the political and social cohesion of the country.

Other countries, including Ireland, Portugal and Spain, have also seen similar pressures. For example, in Spain, workers have been protesting in major cities against the Government's plans to cut spending and increase the retirement age. Similarly, in Portugal there is a popular outcry against the Government's plans to freeze public sector workers' pay. In Ireland, there have been protests against the Government's austerity measures. In other EU countries, there have been protests against governments' perceived failure to respond to the crisis. For example, in France, unions have joined forces to protest against the stimulus measures implemented by the Government. The unions claim that the measures are inadequate to address the labour market and social problems facing the country. Similarly, Italy has seen public protests against the Government's response to the crisis.

Eastern Europe has been especially reactive, as many of these economies, which grew rapidly during the earlier part of the decade, have been particularly hard hit by the crisis. Bulgaria, Estonia, Latvia and Lithuania have all seen major protests critical of their governments' handling of the economy. In Latvia, for instance, where total employment declined by almost 16 per cent between the third quarters



**Table 2.1 Documented instances of social unrest, 2009–10**

	Public protest against austerity measures (spending cuts)	Protest against gov't response to the crisis	Protest against employers <sup>1</sup>	Violence or property damage
Australia			×	
Canada		×	×	×
Brazil		×	×	
Bulgaria	×		×	
Chile		×	×	
China			×	×
France	×	×	×	×
Germany	×		×	×
Greece	×	×	×	×
Iceland	×	×		
India	×	×	×	
Ireland	×		×	×
Italy			×	
Japan	×			
Republic of Korea			×	×
Latvia	×			×
Lithuania	×			×
Mexico			×	×
Portugal	×		×	
Romania	×	×		×
Russian Federation		×	×	×
South Africa		×	×	×
Spain	×	×		
Thailand	×	×	×	×
Turkey	×		×	×
Ukraine		×	×	
United Kingdom		×	×	×
United States	×	×		

Notes: <sup>1</sup> Includes public sector workers protesting against the government in its role as employer.  
 An «X» denotes an action in that area.  
 Source: IILS, based on national sources.

of 2008 and 2009, protests were larger than any since the country became independent from the Soviet Union. As austerity measures were announced in these countries, more protests followed. In Romania, union members protested as the Government announced 25 per cent cuts in wages for state sector employees and 15 per cent cuts in unemployment benefits and pensions to meet requirements for an International Monetary Fund (IMF) rescue package.

While countries of the EU have been the most active, there have been other incidents of social unrest around the world. In the United States, where the crisis began, the focus of unrest has been on government expenditure to save the banks and rescue the economy. The so-called Tea Party movement has staged several demonstrations in US cities to protest against expensive measures taken by the Bush and Obama Administrations aimed at restoring the US economy. Even in China, where there is a strong economic recovery, there have been some incidents of protests. While these protests are not generally well documented, former workers have staged demonstrations in response to plant closures as the country reacts to slowing export demand.



### **...along with a general increase in number of strikes and lockouts...**

Not surprisingly, recent data illustrates that the total number of strikes and lockouts rose in 2009.<sup>3</sup> This increase is particularly acute in emerging economies in Latin America, such as, Argentina, Brazil, Chile and Peru. Other countries, notably, Australia, China and Rep. of Korea have also reported increase in number of strikes and lockouts. Meanwhile, the number of work days lost because of protest has increased among advanced economies in Europe, along with a general increase in the total number of strikes and lockouts.

### **... and there is also fear of political unrest or extremism.**

Instances of public unrest have so far mostly been reported among Central and Eastern European economies and advanced economies in Europe. However, among major economies, such as France, Germany, Italy, Spain, the United Kingdom and the United States, there is still considerable fear of social unrest.<sup>4</sup> Besides the documented cases of social unrest, there is a real danger that the situation could worsen in the coming months. According to a recent poll, 95 per cent of French and 90 per cent of Spanish citizens believed that an increase in the number of strikes and demonstrations were highly probable. Likewise, more than 80 per cent of British, German and Italian believed strikes and demonstrations highly probable. Meanwhile, augmenting earlier trends in these countries, more than 50 per cent of the population in these countries believe that political extremism is on the rise.

The World Gallup Poll conducted surveys in Latin America and the Caribbean in 2008 and 2009, where respondents were asked whether their countries were headed towards political and social unrest. The number of respondents agreeing with the proposition increased in 2009. In Brazil, for example, 34 per cent of respondents believed that the country was headed towards unrest in 2009, up from 28 per cent in 2008. In Honduras, the increase was most dramatic: 50 per cent of the respondents believed that their country was headed towards unrest, up from 37 per cent in 2008. In 13 out of the 16 countries where the surveys were conducted, more than 30 per cent of respondents agreed that their country was headed towards unrest.

### **As expected, risk of unrest shows significant linkages with social indicators.**

The Economist Intelligence Unit (EIU) undertook a global risk assessment in 2009, and ranked countries from 0 to 4, 0 being the least likely to go through a period of social unrest and 4 being the most likely. This analysis took into account political, social and economic development in the aftermath of the financial and economic crisis of 2008–09.<sup>5</sup> According to the EIU, most of the world remains at

3. Source: ILO Statistical Department, 2010

4. Source: Harris Poll, March 2009; data available only for France, Germany, Italy, Spain, the United Kingdom and the United States.

5. According to the EIU, “the ratings and scores for the operational risk model rely on the expert opinion of our analysts working in regional teams. These analysts have a wide range of open and closed sources at their disposal. One of the main closed sources is our network of in-country experts who provide detailed, regular information on conditions within a country. The business operating risk model also draws on the existing analytic work already developed at the Economist Intelligence Unit through its Country Risk Model (available through the Country Risk Service) and business environment rankings model (available through the Country Forecasts).”

“medium” to “very high” risk of social unrest. It rated 62 of 179 included countries as being at “high” or “very high” risk of social unrest. Furthermore, another 64 countries were rated as being at “medium” risk of unrest. It is important to note that the EIU assessment is an overestimation of the actual situation as it was conducted in the second half of 2009, when much of the world was still reeling from the crisis. Furthermore, the assessment is subjective and is likely to be influenced by day-to-day events that have no medium to long-term consequences.

Despite the limitation of the EIU data, it is possible to make meaningful deductions by comparing them with other indicators. Countries where people reported the lowest job satisfaction and lower confidence in government were also the countries with a higher risk of social unrest. For example, among countries at low risk of social unrest, 81 per cent of survey respondents said that they were satisfied with their job. Meanwhile, in countries at high risk of social unrest (ranking 3 and 4), 72 per cent and 69 per cent of survey respondents, respectively, said they were satisfied with their job. The story is similar when it comes to confidence in government. Among countries at low risk of unrest (0 and 1), a little less than 60 per cent of respondents said that they had confidence in their government. But in contrast, among countries with high risk of social unrest (3 and 4), only 38 per cent and 47 per cent of survey respondents, respectively, said that they had confidence in their government.

Pre-crisis data on societal trust and happiness, in comparison with the 2009 data on social unrest, show that countries with higher endowment of trust and happiness are least likely to see social unrest. For example, trust among countries that have low risk of social unrest is 0.53 (that is, 53 per cent of respondents said that most people in their country could be trusted), while it is only 0.23 for countries that are at high risk of unrest. The level of trust drops precipitously as we move from countries at low risk to those at high risk. Countries where more people report that they are happy are also the ones that are at low risk of social unrest. For example, among countries at low risk of social unrest (rank 0), 93 per cent of people say that they are “very happy” and/or “quite happy” with their life. Conversely, among countries at high risk of unrest, only 67 per cent of people say they are “happy” or “quite happy” with their life. Hence, it seems that individual happiness is associated with high levels of social cohesion.

### **Past evidence of social unrest provides a wake-up call to policy-makers.**

Now that it is evident that the risk of unrest is interlinked with several social indicators, it is important to take stock of the past to understand the consequences of unrest. Past evidence shows that social unrest usually follows a severe economic downturn (see box 2.1). It is common for people to express their dissatisfaction with their life, their employers, and their governments by taking to the streets. Indeed, protest is the oldest form of collective expression of social discontent. In the majority of cases from the twentieth and twenty-first centuries, the prevalent consequence of social unrest (protests) was a change or reshuffle of government. In other cases, protests were held against IMF austerity measures, which in turn forced governments to change course and adjust economic policies to quell risks to the social environment. If there is one lesson that can be drawn from history, it is that the current environment of social malaise should be a wake-up call to policy-makers to put in place the right set of policies to address people’s needs while paving the way for a sustainable recovery.

### Box 2.1 Economic downturns and social unrest: Lessons from history

Economic downturns have historically been a major source of social unrest. From a sociological point of view, recessions are prime opportunities for unrest. In his 1962 essay “Toward a theory of revolution”, James Davies states that: “Revolutions are most likely to occur when a prolonged period of objective economic and social development is followed by a short period of sharp reversal” (1962, p. 5). While this definition is generally used in terms of politics and not economics, this is exactly what happens when a boom is followed directly by a recession.

Downturns can also create a great deal of social conflict: a lack of work often leads to migration when basic needs are not met, and nativism is often the result. This can also lead to crime, as desperate people turn to theft and squatting to meet their needs. Recessions have led to violence and extremism, and even brought down regimes.

The United States, not usually known for social unrest, saw widespread civil unrest during the Great Depression. One in four Americans were out of work, and that had a serious impact on the social climate. But protests due to economic reasons are more common in developing and emerging economies. For example, during the peso crisis in Mexico in 1995 (also known as the tequila crisis), Mexican peasants shut down the country’s stock market. Likewise, the Asian crisis in the late 1990s was a source of a great deal of unrest in Asia. Indonesia, Republic of Korea and Thailand saw mass protests against their governments’ responses to the crisis. For example, in the case of Indonesia, street protests brought down the Government.

Austerity measures also have a long history of leading to social unrest. The IMF has become infamous for imposing austerity measures on developing countries, which has often provoked anger from constituents of these countries. While these austerity measures are intended to promote currency stability and export market openness, there are almost always losers. In many cases, these measures hurt the lower and middle classes through removal of government subsidies and public services.

Of the approximately 80 countries that received IMF assistance in the 1970s and 1980s, 26 experienced austerity protests, most of which were during the 1983–85 period. These took different forms, from food riots in Morocco to violent demonstrations in Chile. In some countries, such as Haiti, the Philippines, Sudan and Turkey, demonstrations eventually toppled governments (Walton and Ragin, 1990).

Austerity measures have also been used in developed countries, and have found detractors there as well. After the Yom Kippur War in Israel in 1974, the Government imposed drastic austerity measures to restore currency reserves, including a drastic devaluation of the Israeli pound, which led to mass protests in Israeli cities (Brilliant, 1974). Likewise, in 1977, Paris and other major French cities were brought to a standstill by a nationwide strike to protest against the Government’s austerity measures under Prime Minister Barre. These issues have continued to lead to strikes in the twenty-first century. In 2001, when Argentina faced a currency crisis, austerity measures aimed at cutting the country’s budget deficit led to massive protests and vandalism.

Seen through this lens, the latest round of protests is part of a tradition of social unrest in response to government action and inaction. The majority of these protests ended relatively quickly and with limited violence. Nevertheless, growing unrest points to frustration with governments and is a wake-up call to politicians that their constituents are unhappy with their country’s performance. This has led to the downfall of governments, and even regimes, in the past, and should be a lesson for the present.

## B. Explaining changes in social climate: The role of unemployment and income inequality

The preceding section has shown that the global social climate has worsened since the start of the present crisis. This section examines the possible determinants of this deterioration, with a special focus on labour market and economic developments.

### **Past episodes of social unrest point to the role of inequality, poverty and high unemployment...**

Studies have shown that unemployment spells reduce one's life satisfaction and general social well being – even after finding employment (Clark and Oswald, 1994; Oswald, 1997; Clark et al, 2001). There is also a connection between reduced social well being and the duration of unemployment. This is of particular concern as long-term unemployment and discouragement – as documented in Chapter 1 – is on the rise. Indeed, as Section A illustrated, life satisfaction is already on the decline in several parts of the world.

But, in order to understand whether the decline in people's perceptions of the quality of their lives could manifest into social unrest, there is a need to look at relevant literature to understand what factors that could potentially play a role.<sup>6</sup> Studies have shown that high levels of inequality, social exclusion and perceived unfairness in social relations pose serious risks to social cohesion (Alesina and Perotti, 1996; Sala-i-Martin, 1996; Schock, 1996; Easterly and Levine, 1997; Gurr and Moore, 1997; Elbadawi, 1999). Justino (2005) says that persistent poverty and inequality have been shown to increase a society's propensity for engaging in social unrest.

In their study of developed countries, Green et al. (2006) show a negative relationship between income inequality and social cohesion – that is, higher income inequality is associated with lower degree of social cohesion. The authors define social cohesion as “a property that binds whole societies together”, and that it includes shared norms and values, shared identity and belonging, continuity and stability, risk sharing, equitable distribution and strong civil society.

In their study of Indonesia, Tadjoeddin and Murshed (2007) find that economic contraction and increase in poverty are positively associated with level of violence. They show that growth and poverty reduction are good for social harmony. However, they point out that there is an inverted-U-shaped relationship between violence and stages of economic development, hence human development is more important if a country were to reduce violence at all levels of development. Dimensions of human development that are especially important are distributional issues (income inequality or relative deprivation) and access to opportunity in terms of education and labour market.

Walton and Ragin (1990) apply sociological theory to explain mass protests in the developing world from the mid-1970s to the 1980s. These protests formed in developing countries as governments implemented austerity programmes imposed by international organizations such as the IMF and the World Bank. The authors use factor analysis to assign a measure of unrest, based on number of incidents, whether or not there was rioting, number of cities and extent of the protests. They

6. Note that the studies covered in this section are intended to provide a quick overview rather than an exhaustive examination of the literature.

show that the greatest impacts come from over-urbanization and the involvement of international agencies in domestic policy.

Auvinen (1996) presents an alternative to the commonly believed hypothesis that IMF intervention and austerity measures create social tension. It is his contention that countries go to the IMF in times of economic crisis. Thus, while protesters take to the streets because they oppose austerity measures, interventions may have saved countries from much worse protests had governments failed to solve economic crises on their own. His results indicate that IMF intervention only plays a role when interacted with other variables. Thus, it may be that IMF programmes are more likely to cause protests in countries where there is a high level of urbanization and economic development and a democratic political regime.

Lehman-Wilzig and Ungar (1985) show that per capita GNP and GNP growth were both positively correlated with protests, suggesting that improvements in output result in a greater number of protests. This can be explained by rising income inequality during times of rapid growth. High unemployment and inflation, however, are also positively correlated with protest events. Thus, it seems that improvements in output performance coupled with high unemployment and inflation are likely to create the potential for unrest.

Parvin (1973) presents an econometric analysis of social unrest, which he defines in terms of deaths resulting from group violence per million population. He uses this measure because it is an unambiguous measure of the extent of social unrest. His independent variables are per capita income, income distribution (the Gini coefficient), income growth, socio-economic mobility, modes of communication (radios per capita) and urbanization. He finds that per capita income, income growth, income distribution and socio-economic mobility are negatively correlated with social unrest, while communication intensity and urbanization are positively related to unrest.

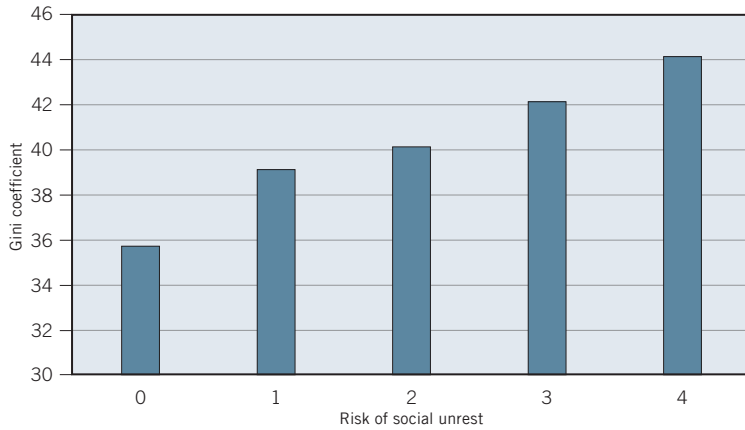
Norris et al. (2005) use data collected in Belgium to analyse the types of people who attend protests. They are interested in whether protesters are typically extremists and troublemakers, which is how they are often portrayed in the media, or if they are primarily citizens who are exercising their right to express political opinions. The authors find that most protesters are politically active and belong to traditional civic associations, such as political parties and unions. They also tend to be disproportionately left wing, but not far left. Young people are more likely to participate, but protesters come from all social classes.

### **...and this is confirmed by new empirical analysis of the determinants of social unrest...**

Higher risk of social unrest is associated with higher income inequality (figure 2.6). Moreover, experience from past economic downturns shows that low-income households (lower percentiles in income distribution) are the ones most severely affected by a crisis. Rising unemployment causes the bottom of the earnings distribution to fall off relative to the median, which in turn increases inequality in earnings (Heathcote et al., 2010b).<sup>7</sup> In the absence of targeted social measures to cushion the fall in earnings for these households, income inequality could worsen.

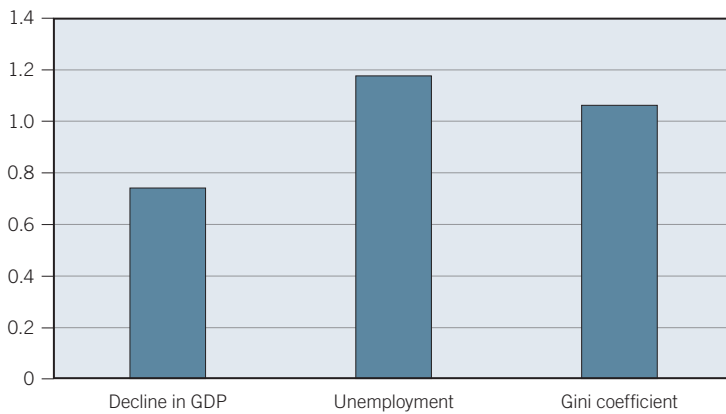
7. Decline in earnings among poorer households can be persistent. For example, in the United States, earnings at the 10th percentile declined by 20 per cent in the 1980–82 recession and it took more than ten years to return to pre-recession levels. Labour earnings are not the only source of income for households, especially for the ones at the lower end of the income distribution.

**Figure 2.6 Income inequality associated with risk of social unrest**



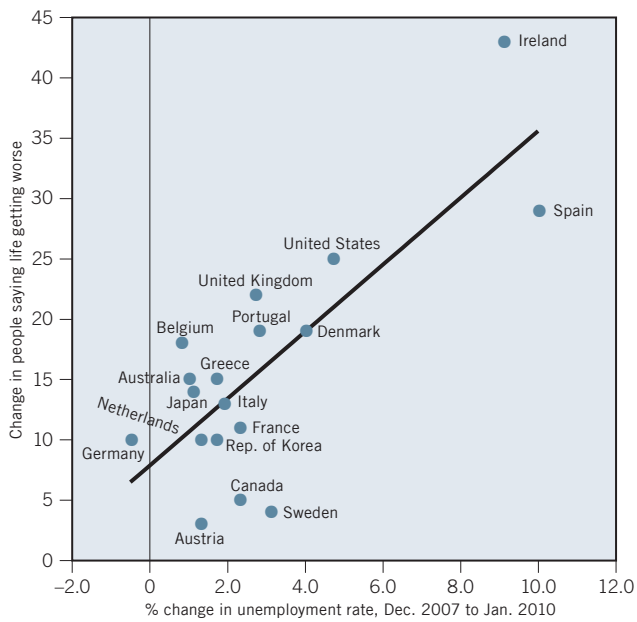
Note: Estimates based on a sample of over 150 countries.  
 Source: ILS calculations based on EIU, 2009, and *Human Development Report 2009*.

**Figure 2.7 Risk of social unrest highest with unemployment (odds of belonging to higher risk category for social unrest)**



Note: See Appendix A for the model and results.  
 Source: ILS calculations.

**Figure 2.8 Rising unemployment and perceived decline in quality of life (percentages)**



Source: ILS, based on Gallup World Poll Data; surveys conducted in 2009.



Government and private transfers, such as unemployment insurance, welfare and pension income, are some of the counterbalancing sources of income that tend to increase when earnings fall, thus damping the increase in income inequality.

An original analysis, using a methodology developed for this report, shows that the risk of social unrest is highest with increase in unemployment rate (see figure 2.7).<sup>8</sup> For example, a 1 unit increase in unemployment increases the odds of being at higher risk of unrest by a factor of 1.2. The second important contributor is income inequality, as measured by the Gini coefficient. A 1 unit increase in Gini coefficient increases the odds of being at high risk of social unrest by 1.1. Decline in GDP does increase the odds of unrest, but the effect is weaker compared with unemployment and income inequality. A 1 unit decline in percentage change in GDP increases the odd of social unrest by 0.7. The findings presented in this section reveal that a job-rich recovery is the way to reduce social tensions and lower the risk of unrest.

Interestingly, among the advanced economies, the ones with the biggest increases in unemployment rates also saw larger proportions of people reporting declining quality of life (figure 2.8). For example, Ireland and Spain, which had the largest increases in unemployment rates among the advanced economies, had the largest proportions of people who said that their lives were getting worse. The story is similar for the United States. In general, pessimism about the economic future is most prevalent in countries with high rates of unemployment.

Young people have been disproportionately affected by the global crisis, which in turn has exacerbated earlier challenges. There is concern that the situation for youth will become unsustainable in some countries, representing a threat to social cohesion (Ha et al., 2010). Countries with high youth unemployment rates are also the ones where employed youth report lowest job satisfaction. Low satisfaction indicates fear of losing a current job and the uncertainty surrounding the prospects for domestic labour markets.

### **...by contrast, the risk of social unrest is weakly related to the size of fiscal packages.**

According to the EIU data on risk categories of social unrest (ranked 0 to 4, 0 being very low risk and 4 being very high risk), most countries fall in rank 2, which indicates medium risk of social unrest. On average, the size of the economic stimulus package announced by a country in this group is 2.8 per cent of GDP, which is more or less the same as for the low-risk countries (table 2.2). However, the average change in GDP between 2008 and 2009 was -4.8 per cent, the most severe decline among all of the groups. The average decline in employment was also the most severe, at 3.1 per cent.

For countries at high risk of social unrest – ranking 3 and 4 – the economic indicators provide a mixed picture. The declines in GDP and employment are not as severe in this group as for countries at medium risk of social unrest (ranking 2). However, it is important to note that the sample size is considerably smaller in the last two groups (ranking 3 and 4); rank 2 contains the largest sample of countries.

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8. See Appendix A for details of the empirical methodology and results.



**Table 2.2 Risk of unrest compared with economic indicators**

Risk of social unrest, 2009 (rank)	Average values	
	Economic stimulus package (percentage of GDP)	GDP per capita (US\$, 2009)
0	2.9	59,396
1	2.7	30,037
2	2.8	18,334
3	5.0	5,336
4	1.1	16,847

Note: Estimates based on a sample of 56 countries. EIU data are available for more than 150 countries, but the stimulus data are limited to 56 countries.

Source: ILS calculations.

## Policy considerations

Available social indicators paint an unhealthy picture of the global social climate in the wake of the financial and economic crisis that erupted in 2008. In a number of countries, this has manifested into social unrest, as people have expressed dissatisfaction with the way their governments have handled the crisis by staging protests. Policy-makers should heed the warning signals and set in motion the right set of policies to improve the global social climate while paving the way for a sustainable recovery.

In particular, this chapter shows that lower unemployment combined with longer term efforts to reduce excessive income inequalities is the key to reducing the risks of social unrest – while also supporting the economic recovery itself (see Chapter 1). In particular, countries that have the highest rates of unemployment are most at risk of social unrest. It is therefore essential to move ahead with implementation of the Global Jobs Pact (bearing in mind the fiscal constraints analysed in Chapter 3). Countries with high levels of income inequality are also at risk of social unrest. Income inequality data for 2009 are not yet available, but past experience shows that income inequality tends to increase during times of crisis, and the primary source of this is the fall in earnings of people in the lower percentiles of income distribution. Effective labour market and social policies, which cushion the fall in earnings for low-income households, can mitigate the increase in income inequality and prevent the social climate from worsening further.

In the medium to long term, in order to tackle income inequality it is important to address distributional issues. Taxes and transfers can be powerful redistribution mechanisms, but for them to work, taxes have to be progressive and social transfers have to address the needs of people who are left out of economic gains. At the very least, social transfers should offset the reduction in taxes. During the period of economic expansion prior to the present crisis, low-income households were largely left out as wages failed to keep up with productivity (IILS, 2008). And now, during the crisis, it is low-income households that are facing the brunt of the crisis. This is key to understanding the risks facing social climate and designing policies to mitigate those risks.

## Appendix A

# Estimating the determinants of social unrest<sup>9</sup>

The dependent variable is social unrest, which is treated as an ordinal variable under the assumption that the levels of risk have a natural ordering (from “not likely” or 0 to “most likely” or 4), but the distances between adjacent levels are unknown. It is inappropriate to use ordinary least squares (OLS) for ordinal dependent variables because the OLS method assumes that the distances between categories are the same. For example, the distance between “very high risk” (4) and “high risk” (3) equals the distance between “medium risk” (2) and “low risk” (1). In most cases we cannot make that assumption, but that is what the OLS would do if used with ordinal variables. The appropriate model to be used in this case is called the ordered logit model (ordered logistic regression or proportional odds model), which is an extension of the logit model (logistic regression) for dichotomous dependent variables, allowing for more than two ordered responses. In this case, there are five ordered responses, from 0 to 4.

In the ordered logit model, there is an observed ordinal variable  $Y$  (risk of social unrest, from 0 to 4).  $Y$ , in turn, is a function of another variable,  $Y^*$ , which is not measured (called a latent variable). Unlike  $Y$ ,  $Y^*$  is a continuous variable, and the value of  $Y^*$  determines the value of the observed ordinal variable  $Y$ .  $Y^*$  has various threshold points, and value of the observed variable  $Y$  depends on whether or not a particular threshold point has been crossed. For example, if  $M = 5$ :

$$\begin{aligned} Y_i &= 0 \text{ if } Y_i^* \leq k_0 \\ Y_i &= 1 \text{ if } k_0 < Y_i^* \leq k_1 \\ Y_i &= 2 \text{ if } k_1 < Y_i^* \leq k_2 \\ Y_i &= 3 \text{ if } k_2 < Y_i^* \leq k_3 \\ Y_i &= 4 \text{ if } Y_i^* > k_3 \end{aligned}$$

One can think of  $Y$  as being a collapsed version of  $Y^*$ . For example,  $Y^*$  can take on an infinite range of values (continuous variable), which might then be collapsed into five categories of  $Y$ . In the population, the continuous latent variable  $Y^*$  is equal to:

$$Y_i^* = \sum_{k=0}^K \beta_k X_{ki} + \varepsilon_i = z_i + \varepsilon_i$$

Note that there is a random disturbance term, which in this case has a logistic distribution. This reflects the fact that relevant variables might be left out of the equation, or variables might not be perfectly measured. The ordered logit model estimates part of the above equation:

$$Z_i = \sum_{k=0}^K \beta_k X_{ki} = E_i(Y_i^*)$$

9. Methodology adapted from Menard (2002) and Murphy (1996).

Because of the random disturbance term, the unmeasured latent variable  $Y^*$  can be either higher or lower than  $Z$ . The  $K$ ,  $\beta$ s and the  $M - 1$ ks are parameters that need to be estimated, and using the corresponding sample estimates we compute:

$$Z_i = \sum_{k=0}^K \beta_k X_{ki}$$

We then use the estimated  $M - 1$  cutoff terms to estimate the probability that  $Y$  will take on a particular value. For example, when  $M = 5$ ,

$$\begin{aligned} \Pr(Y = 0) &= 1/[1 + \exp(Z_i - k_0)] \\ \Pr(Y = 1) &= 1/[1 + \exp(Z_i - k_1)] - 1/[1 + \exp(Z_i - k_0)] \\ \Pr(Y = 2) &= 1/[1 + \exp(Z_i - k_2)] - 1/[1 + \exp(Z_i - k_1)] \\ \Pr(Y = 3) &= 1/[1 + \exp(Z_i - k_3)] - 1/[1 + \exp(Z_i - k_2)] \\ \Pr(Y = 4) &= 1 - 1/[1 + \exp(Z_i - k_3)] \end{aligned}$$

Hence, using the estimated value of  $Z$  and the assumed logistic distribution of the disturbance term, the ordered logit model can be used to estimate the probability that the unobserved variable  $Y^*$  falls within the various thresholds.

Ordered logistic regression results show that unemployment rate is positively associated with the risk of social unrest (see table A2.2). This means that increase in unemployment rate is likely to increase the risk of social unrest. Income inequality measured by the Gini coefficient is also positively associated with social unrest, which means that increase in inequality is likely to increase the risk of unrest. Conversely, increase in GDP growth rate is negatively associated with the risk of unrest, but the association is weak. Among the social indicators, increase in life satisfaction is negatively associated with the risk of social unrest. Likewise, higher confidence in government and higher trust among people are negatively associated with the risk of social unrest. Increased perception of unfairness, however, is positively associated with the risk of social unrest.

**Table A2.1 Definition and sources of variables used in the regression analysis**

Variable	Definition	Source
Risk of social unrest	Ordering of countries from 0 to 4, 0 being the very low risk and 4 being very high risk	Economist Intelligence Unit (2010)
Unemployment rate	Rate of unemployment in 2009	Central Intelligence Agency (2009)
GDP growth rate	Real GDP growth rate in 2009	Central Intelligence Agency (2009)
Gini coefficient	Commonly used measure of income inequality	Human Development Index (2007)
Fiscal stimulus	Fiscal stimulus as a percentage of GDP	International Institute for Labour Studies (IILS) (2009)
Life satisfaction	Survey question: How satisfied are you with your life, from 1 to 10? The values are averages for each country	World Values Survey (2007) Gallup World Poll Data (2009)
Confidence in government	Survey question: Do you have confidence in national government? Percentage of respondents that answered yes	Gallup World Poll Data (2009)
Perception of unfairness	Survey question: Can people get ahead by working hard in this country, or not? Percentage of respondents that answered no	Gallup World Poll Data (2009)
Trust	Survey question: Do you trust most people? Percentage of respondents that answered most people can be trusted	World Values Survey (2007)

**Table A2.2 Ordered logistic regression results  
(dependent variable: risk of social unrest)**

	1	2	3	4	5
Unemployment rate	0.127** (1.96)	0.030 (0.41)	-0.018 (0.21)	-0.079 (0.86)	0.059 (0.4)
GDP growth rate	0.043 (0.78)	-0.019 (0.31)	-0.046 (0.57)	-0.070 (0.82)	-0.71** (2.32)
Gini coefficient		0.079** (2.14)	0.107** (2.27)	0.085* (1.74)	
Fiscal stimulus			0.146 (1.04)		
Life satisfaction				-1.35*** (2.9)	-1.55 (1.29)
Confidence in government					-0.127* (1.86)
Perception of unfairness					-0.147** (1.91)
Trust					-0.163*** (2.5)
Chi square	4.16	7.39	7.99	14.96	20.78
N	56	53	35	30	20

Note: Absolute value of *t*-statistics in parenthesis. Significance levels: \* significant at 10 per cent, \*\* significant at 5 per cent, \*\*\* significant at 1 per cent. For definition of variables, see Table A2.1.

**Table A2.3 Predicted probabilities of risk of unrest**

Country	Very low	Low	Medium	High
Brazil	0.090566	0.558311	0.343358	0.007766
Canada	0.728556	0.251762	0.019392	0.00029
Chile	0.009169	0.137393	0.775761	0.077677
Colombia	0.037738	0.383479	0.559298	0.019486
France	0.019381	0.248958	0.693722	0.037939
Germany	0.188585	0.623195	0.184878	0.003342
Italy	0.161859	0.619976	0.214146	0.00402
Japan	0.024736	0.295304	0.650147	0.029812
Mexico	0.00035	0.006102	0.303422	0.690126
Peru	3.18E-05	0.000559	0.038649	0.960761
Republic of Korea	0.031743	0.346509	0.598527	0.023221
Romania	0.00136	0.023288	0.611359	0.363992
Russian Federation	0.013984	0.194363	0.739561	0.052092
Slovenia	0.000863	0.014916	0.509948	0.474274
South Africa	0.010094	0.149025	0.769877	0.071004
Spain	0.003294	0.054492	0.751392	0.190822
Ukraine	2.86E-05	0.000503	0.034919	0.96455
United Kingdom	0.021452	0.267724	0.676493	0.034331
United States	0.511744	0.439356	0.048157	0.000743

Note: Based on regression 5 in table A2.2. "High" includes both "high" and "very high," hence only four categories of risk.

Source: IILS calculations.

Odd ratios are calculated based on regressions on table A2.2. These ratios are cumulative odds of belonging to a certain category or higher versus belonging to one of the lower categories. For example, estimates of odd ratios based on table A2.2 reveal that the odds of being at higher risk of social unrest rather than lower risk is the highest for countries with high unemployment.

Furthermore, ordered logistic regressions also allow the calculation of “predicted probabilities” of belonging to one risk category or the other based on the independent variables. Predicted probabilities of risk of social unrest based on this econometric exercise show that advanced economies, such as Canada, Germany, Italy and the United States, are at low or very low risk of unrest. Also included in this group is Brazil. Meanwhile, countries at high risk of unrest include Mexico, Peru and Ukraine. Most other countries, such as Chile, Colombia, Japan, Republic of Korea, Romania, Russian Federation, South Africa, Spain and the United Kingdom are at medium risk of unrest. The predicted probabilities roughly mimic the original EIU data on social unrest. The number of countries included table A2.3 is small because of the lack of availability of data across all indicators in the regression model in column 5 of table A2.2.

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