

Session Number: First Poster Session
Time: Monday, August 23, PM

*Paper Prepared for the 31st General Conference of
The International Association for Research in Income and Wealth*

St. Gallen, Switzerland, August 22-28, 2010

Social Indicators System for the Social Risk Management in Romania

Anghel Irina

For additional information please contact:

Name: Anghel Irina

Affiliation: The Institute of National Economy, Romanian Academy

Email Address: irina_c_anghel@yahoo.com

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Author: Anghel Irina, PhD Student in Economics

1. Introduction

Until recently, the social policy makers approached the issue of social risks in a mainly ex-post manner, focusing on the assumed role of providing people affected by diminished income following an external shock, with the minimum necessary means for a decent living. Social protection systems were traditionally understood as social policy instruments for protecting individuals against risks affecting their income or income earning capacity that, due to market failures or to the individuals' inability, cannot be equitably covered by the market: illness, accidents, birth, disability, unemployment, old-age, death. To this end, social transfers and material assistance were granted to the people under risk through complex systems of public social assistance and insurance programmes. They were often considered ineffective in terms of poverty reduction, subversive to economic growth and too costly.

The literature, as well as the practice at all policy levels have witnessed an unambiguous shift towards a new approach, based on new coordinates and principles: share of risk protection responsibility amongst the various involved actors (individual, family, household, community, market, NGOs, public institutions); public effort focused on preventing risk occurrence and diminishing risk exposure rather than on post-event measures; as well as on widening the range of instruments and abilities of the individual and community for a better risk management.

Social Risk Management (SRM) is a concept and approach that may be considered as a benchmark of the new conceptual framework for social protection. It adopts and adapts the principles of risk management to the social policy dimension, designing specific strategies and instruments of risk management that address many intercorelated policy areas, besides social protection: education, health, labour market, macroeconomic, environmental policies, natural disaster management, etc.

In spite of a rich literature on the social risk management¹, the issue of relevant indicators design and implementation is marginally tackled. Yet, the social protection literature and other related research areas extensively use a wide range of social indicators that are, to a large extent, appropriate for SRM.

This paper acknowledges the high importance and helpfulness of relevant indicators in covering every one of the SRM strategy elaboration stages and attempts, based on a specific methodology and principles, to build a system of socio-economic indicators that might assist policy makers in their effort. After a concise introduction into the social risk management

¹ concept and methodology (Holzmann, Jorgensen 1999, Holzmann 2001), policy implications (Holzmann, Jorgensen, 2000; Draxler, 2006), risk and vulnerability concepts (Holzmann 2001), economic models for assessing risk and vulnerability and their sources (Heitzmann, Canagarajah, 2002), templates for risk identification (Heitzmann 2000)

concept and methodology, the paper presents the main coordinates of the indicators selection/elaboration methodology in order to apply them for the specific context of the Romanian social risks landscape.

2. Social Risk Management Indicators. Concept and methodology

2.1 Conceptual background

Social Risk Management (SRM) is a concept and approach that goes beyond mere *social protection*, as it integrates policies from politic areas that, even if only tangential to the social sector, may have significant impact on vulnerability and income dynamics (such as macroeconomic policies, natural disasters prevention, financial market regulation, rural and regional development, formal and informal labor market, public health, public investment in infrastructure, etc). Its complexity stems from the intersectorial dimension.

According to the paper that proposed and promoted this concept (Holzmann, Jorgensen, 2000) SRM includes the broad range of formal and informal proactive and reactive risk management strategies used by individuals, communities, nations and communities of nations, including actions by the public, private, and informal sectors. From a SRM perspective, social protection addresses the issue of how vulnerable households can be helped to better manage risks and become less susceptible to damaging welfare losses. It also refers to the public measures that would ensure the poorest and most vulnerable access to the needed financial and material support. Given the institutional background (most of the studies dealing with SRM are conducted within the Social Protection & Labor Unit in the Human Development Network of the World Bank, it was generally poverty oriented, addressing the social risks with high potential consequences on poverty incidence, depth or on vulnerability to poverty. Yet, the general conceptual approach, methodologic principles are very suitable to the design of any other social risk management strategies.

As it follows the overarching objective of human sustainable development, the SRM undertakes three main goals: ensuring minimum welfare for all, through guaranteeing access to the goods and services that provides them with the protection they might need in case of social risks; designing strategies and pro-active policies focused on measures of preventing the risk occurrence and exposure, and for protecting the individual; actively encouraging the development of the social and individual capital and potential.

The SRM approach is ex-ante oriented. It is focused on the issue of *vulnerability* which is a dynamic outlook to poverty and on providing the individual and population with effective instruments of risk management. Vulnerability, as a concept, is forward looking and defined as the probability of experiencing a loss in the future relative to some benchmark of welfare, due to uncertain negative events. The degree of vulnerability depends on the characteristics of the risk and the household's ability to respond to the risk, as well as on the time horizon. The poor and near-poor tend to be the most vulnerable because of their exposure to risks and limited access to assets (broadly defined) and limited abilities to respond to risk (Alwang, Siegel, and Jorgensen, 2001).

An effective social risk management system would replace the informal ineffective, often destructive household strategies of poverty risk management – such as withdrawing children from school, delayed health care expenditures, productive assets selling, etc. with ex-ante

instruments and mechanisms that would help them anticipate a given risk and fight it (through public works, crop insurance, food stocks, savings, financial literacy, human capital development, etc). SRM asks for rethinking the traditional public policies for social assistance, insurance and labor market.

There are three main „arrangements” for SRM (see Table 1 and Annex 1): *informal instruments* for risk prevention, mitigation (migration, crop/risk diversification, familial, communal arrangements, self informal development, etc) or coping (assets selling, education/health expenditures decrease, etc); *formal private instruments* (market arrangements) and *public instruments* (social security and assistance policies, unemployment policies, etc). Public intervention has to support the private informal and formal efforts for risk prevention, to prevent the ex-post ineffective risk management instruments, to ensure the access of the vulnerable to market instruments, etc.

Table 1. Risk management instruments classified by risk management strategies and the level of formality of risk management actors

	Private informal (main actors: individuals, households, communities, NGOs)	Private formal (insurance companies, financial market institutions)	Public (governments, donors, international org.)
Risk reduction	<ul style="list-style-type: none"> • Less risky production • Migration • Proper feeding and weaning practices • Engaging in hygiene and other disease preventing activities 	<ul style="list-style-type: none"> • In-service training • Financial market literacy • Company-based and market-driven labor standards 	<ul style="list-style-type: none"> • Good macroecon. policies • Pre-service training • Labor market policies • Labor standards • Child labor reduction • Disability policies • AIDS / disease prevention
Risk mitigation	<ul style="list-style-type: none"> • Multiple jobs • Investment in assets • Investment in social capital • Marriage/family • Community arrangements • Share tenancy • Tied labor • Extended family • Labor contracts 	<ul style="list-style-type: none"> • Investment in multiple financial assets • Microfinance • Old-age annuities • Disability, accident and other insurance (e.g., crop insurance) 	<ul style="list-style-type: none"> • Pension systems • Asset transfers • Protection of property rights (esp. for women) • Support for financial markets for the poor • Mandated/provided insurance for unemployment, old-age, disability, sickness,
Risk coping	<ul style="list-style-type: none"> • Selling of real assets • Borrowing from neighbors • Intra-community transfers/charity • Sending children to work • Dis-saving of human capital • Seasonal/temporary migration 	<ul style="list-style-type: none"> • Selling of financial assets • Borrowing from banks 	<ul style="list-style-type: none"> • Disaster relief • Transfers/social assistance • Subsidies • Public works

Source: Heitzman, Canagarajah, Siegel, 2002, adapted from Holzmann and Jørgensen, 2000

There are *ex ante* and *ex post* strategies (Holzmann and Jørgensen, 2000; Siegel and Alwang, 1999).

Ex ante actions are taken before a risky event occurs, and *ex post* management takes place after its realization. *Ex ante* risk management allows households to eliminate or reduce risks, lower risk exposure, and/or mitigate against the losses associated with risky events, It consists of three types of strategies:

(a) Risk Prevention or Reduction – actions taken to eliminate or reduce risky events from occurring;

(b) Prevention or Reduction of Exposure to Risk – given the existence of risks, there are actions to prevent or reduce exposure to such risks, and

(c) Risk Mitigation – actions that can be taken *ex ante* to provide compensation in the case of a risk-generated loss (e.g., social contracts, holding of savings, and purchase of insurance).

Ex post risk coping includes responses that are taken *after* a risk has been realized. Risk coping involves activities to deal with realized (or actual) losses, such as the selling of assets, seeking “emergency” loans (from relatives, friends, banks), removing children from school, migration, seeking temporary employment. To help some individuals and households cope, governments sometimes provide formal safety nets such as public works programs, food aid, and other types of transfers.

It should be noticed that, even if *ex ante* measures would seem preferable, as they deal with the risk before it occurs, a variety of different effective instruments is available within each strategy, that all have different private costs and benefits and social welfare effects, and they might either increase or decrease vulnerability over time. Moreover, when selecting a mix of risk responses one has to take account of the many inter-linkages between different types of risk management strategies and instruments.

It is also important to take into consideration – and to take advantage of – the multitude of actors in risk management: individuals and households, communities, social networks, NGOs, the public sector at the local, regional and national level, private sector companies, donors or international organizations. Many of them play dual role, as they demand and, also, supply risk management instruments. According to the level of intervention and of formality, they can be classified as private informal, private formal and public, each operating at micro, meso, macro or global level.

2.2 Methodological guidelines

For every one of the stages shortly presented above, the designers need sound substantiation. They also need instruments for efficiency and effectiveness evaluation. To these ends, the use of social indicators, of instruments that measure and express characteristics of social facts, phenomena and processes, correlations, cause-effect relationships, past results or future potential impacts, etc. is, not only helpful, but crucial. For every one of the stages shortly presented above, the designers need sound substantiation. They also need instruments for efficiency and effectiveness evaluation. To these ends, the use of social indicators, of instruments that measure and express characteristics of social facts, phenomena and processes, correlations, cause-effect relationships, past results or future potential impacts, etc. is, not only helpful, but crucial.

Among main barriers in building the indicators system, there may be mentioned data scarcity, high costs for data gathering and processing, data unavailability. Low relevance of data is another important hindrance, given the most often large temporal lag between data gathering, indicators realization and the moment they are required. This is a major argument for conducting strategic SRM unconstrained by urgency, tight time limits, that is, before acute emergency situations. SRM designers being governmental bodies or representatives, the non-integrated and uncorrelated strategic thinking among various public institutions involved is often a source of significant stiffness, bureaucracy rigidities, overlapping initiatives, redundancy, resources wastage, etc.

The indicators that would be composed, selected and applied should be *specific*, providing clear, concise information; *relevant* to the user's specific needs; *integrated* in a broader picture that would inclusively described all dimensions and characteristics; as far as possible *easy to calculate*, based on available, or gatherable primary data; *cost-efficient* in terms of time, human and financial resources; *dynamic*, as, in order to give an authentic outlook on the phenomenon, to represent the basis for other forecasting and scenario based result/cost/efficiency indicators, they should be able to be presented in a dynamic picture.

The Social Risk Management approach involves running through several stages that would lead the researchers and policy maker to identifying viable strategic alternatives to dealing with social risks.

a. Risk Identification-Prioritization

An integrated, systematic social risk management approach starts with the *identification* of social risks which also have to be, then, *prioritized* for an adequate resource allotment. Risk identification has to be followed by the investigation of risk characteristics and type: preventable (flood) or unavoidable (heavy rainfall), predictable (unemployment) or unforeseeable (accident), idiosyncratic (illness) or covariate (epidemy).

The priority scale may be established according to the frequency /incidence, coverage and potential outcome of the risky event as they may, more or less, reveal more of the risk occurrence probability, the general social impact, the strain it sets on the public social budget. These characteristics have to be conjointly assessed as they may synergetic augment each other's significance and the risk priority.

b. Defining target group

Even if the SRM tackles specific risks in a specific way, it's main focus –stemming from its role – remains on the people involved, the people exposed to, or affected by, the risk. Therefore, it is important to clearly identify the social groups most *exposed* to the risk, *vulnerable* to its outcome, as well as the ones that are already most *affected*, in need of good risk coping instruments. Target group identification is the premises for the design of best suited management strategies and instruments. For relative homogenous groups, a SWOT type analysis would prove instrumental and effective. It may better disclose a present the specific setbacks, assets and potential, favorable and unfavorable circumstances that might, independently or concurrently, support or, on the contrary, prevent the full achievement and effectiveness of the designed SRM strategies.

The *exposure* level to the risk, the *vulnerability* to its outcome as well as the *severity* and dimensions of the risk impact depend on a very extensive range of characteristics, of *risk factors*.

A useful approach is to build the risk chain or, better, *the risk factors causal network*. Often, this represents an intricate task, as many social risks potentiate each other, occupying different places in each other's casual diagram. They are many times interconnected, have common risk factors and, may bring about, on different way, the same most severe outcome: poverty. The risk factors are specific to the already identified vulnerable/exposed/hit social groups. Thus, it is compulsory to

precisely identify the social, demographic and economic characteristics of the target groups as they are most probably pointing out to the specific risk factors. This stage proves very important because it offers the primary information for the design of appropriate preventive, mitigation, as well as coping mechanisms and instruments. A right perception on the risk factors may lead to a better and more facile identification of the measures that diminish the exposure, vulnerability and impact severity levels.

c. Identification of SRM strategy alternatives

This step ushers the *preventive* outlook on the risk management. At this stage, the exposed and vulnerable groups, as well as the risk factors should be / have been clearly identified. The policy designers may now search for instruments that may, either, attenuate or eliminate the risk factors, lowering the exposure to the risk, or, prevent the event occurrence, provided that the risk is avoidable. SRM design process moves on to elaboration of *risk mitigation* strategies when policy makers look for measures implemented before the event occurs but with ex-post consequences. Designing risk mitigation solutions requires a prior identification of currently employed formal, informal, private or public instruments and their assessment. Public intervention shouldn't replace the individual / community / market responsibility, but should be a means for reinforcing and complementing private arrangements, while altering / eliminating the inappropriate ones.

The measures for risk impact attenuation (*risk coping* strategies) depends, mainly, on the specific risk /event characteristics, on the amplitude, coverage of the risk impact, on the clearly identified urgent needs of affected population.

d. Assessments of current and newly identified alternatives

After drawing the alternatives for each SRM strategy type, their impact and efficiency need to be assessed (through ex ante impact studies). This may be performed retrospectively to past experiences, if available, or relating on the past experience of other countries, being vigilant to differences in circumstances, target group characteristics (demographic, behavioral, cultural), etc. The final selection should follow the effectiveness and efficiency of the strategy/instrument criteria, the correlated impact on the various risk factors, synergetic effects, and potential collateral consequences.

As it has been mentioned before, the SRM strategies should complement each other. A good preventive strategy should therefore be accompanied by risk mitigation provisions. They are ex-ante designed and implemented, being intended to attenuate the risk negative impact on the target groups. Especially in case of unavoidable events, the preventive efforts aimed at lowering exposure to the risk are mostly effective if they are joined by *risk mitigation* instruments that diminish the *vulnerability* to the potential outcome. The future impact of the event will be, therefore, lower. Their overall impact should also be assessed. It also has to be considered that mitigation instruments are needed unless the individual/family exposed has access to appropriate informal or formal private risk mitigation instruments.

Many times, in spite of preventive attempts, social risks occur, severely affecting people that need assistance in surmounting the aftermath. For them, the social policy maker should design *risk coping* strategies that would help people avoid using informal coping instruments with long-term negative impact on the individual as well as household (child working, child withdrawal from school, informal unemployment, involvement in self-destructive life-living such as prostitution, drug traffic, etc). Coping instruments should be designed in order to have the greatest efficiency (maximum effect with minimum effort). Their outcome has to be evaluated so that the selection process may be rightfully performed.

With reference to every strategy type described above, the assessment of current management instruments should be assessed as it may represent, beside a reference point for future instrument efficiency evaluation, a means for avoiding unnecessary supplementary public effort.

e. Selection

The next step should be the construction of an integrated system of SRM strategies and instruments, belonging to all SRM perspectives that would work together to best results.

f. Ex-post evaluation

Moreover, all strategic management processes are properly finished through an ex-post impact evaluation of the strategy effectiveness.

2.3. System of the SRM Indicators

An indicators system represents an integrated and coherent network of indicators that are expected to measure all dimensions and components of the investigated social phenomenon, process, or system. Thus, it should be *multidimensional*, *comprehensive* and *holistic* in its approach to a specific social risk management process. It would gather indicators from economic, social, demographic dimensions of the social system. All areas of interest should be covered and, foremost, it needs to provide an integrative perspective. It will address all types of strategic perspectives on SRM, it will cover all stages in SRM process, it will take into consideration the multitude of instruments type, of SRM actors involved. It has to be *tailored* to the user's needs. Another very important feature of an adequate system is *flexibility*. SRM design is a process of constant discovery and, consequently, of constant adaptation and readjustment.

A general classification involves

- a. *Context relevant indicators* group, that gathers indicators for risk identification, prioritization; indicators that identify and characterize target groups; indicators that help reveal causal relationships or verify hypothesis that would support the depiction of the risk factors network relevant to the specific requirements of every type of SRM. As it has been mentioned before, some of these indicators prove useful not only with respect to preventive strategies, but also for mitigation and coping strategies creation.
- b. *Result and effort indicators*, as well as
- c. *Efficiency indicators* related to past, current and future SRM approaches and attempts.

Policy makers should work with indicators covering a wide scale of complexity levels. They may gather highly instrumental information through simple indicators of low data processing level; at the same time, critical information may be available only through indicators' estimation process, following challenging composition, processing or application processes.

The indicators that would be composed, selected and applied should be *specific*, providing clear, concise information; *relevant* to the user's specific needs; *integrated* in a broader picture that would inclusively described all dimensions and characteristics; as far as possible *easy to calculate*, based on available, or gatherable primary data; *cost-efficient* in terms of time, human and financial resources; *dynamic*, as, in order to give an authentic outlook on the phenomenon, to represent the basis for other forecasting and scenario based result/cost/efficiency indicators, they should be able to be presented in a dynamic picture.

As it has been already stated, a social risk management indicators system would most probably address one (or more, yet related) social risks focusing on specific target groups. In order to answer to the specific (real or potential), variant and changeable needs of the user, it is most desirable

that the building of the detailed indicators system should closely follow the stages of the SRM process.

It would be also commendable that, the indicators system created include all relevant / potentially relevant indicators on which, selection criteria to be applied along the SRM design process, according to the specific restrictions, limitations. The indicators might be presented under the template:

Table 2. TEMPLATE

SOCIAL RISK:								
SOCIAL RISK MANAGEMENT <i>STAGE</i> :								
No.	Code	Indicator	Definition	Formula	Primary data source	Data provider	Type	Comments

Source: the authors

3. Social Indicators System for SRM in Romania

3.1 Specific challenges for social risks management in ROMANIA

Since 2007, when Romania was officially acknowledged as a member state of the European Union, it has repeatedly committed to undertaking all efforts for an effective integration process. It has adopted the European vision, strategy and objectives for economic and social development, it has adapted the specific juridical and institutional background to the community requirements and profile and, while dealing with specific internal political, social and cultural setbacks and deficiencies, it struggles to make its economic and social mechanisms functional and developmental.

Like most of the East-European, Romania is confronted with multiple specific challenges stemming from its past, present and future realities, which ask for managing approaches significantly different from those adopted by the more-developed, western societies.

- The transition to a functional market-driven economy, based on knowledge and integrated into the global economy, has been joined by social change and the transformation of the social structure and values: worsened overall dependency ratio, deeply changed family and social relationship patterns, labour structure and employment relations, transformed social welfare class structure, individualization, monetization, increased individual responsibility, higher segregation, inequalities and intergenerational transmission of poverty.

In the context of the **transition difficulties and inherited burdens**, it can be said that the social protection and social policy systems have undergone major positive transformation. They are more integrated and connected to other tangential policy sectors; they follow specific objectives aligned to the European goals and standards and employ a large array of instruments. Most strategies and plans are joined by ex-ante and ex-post evaluations and are followed by positive outcomes.

Despite improvements and successes, the Romanian system of social protection and social risk management is still highly confronted with difficulties stemming from other universal challenges such as globalisation and demographic aging.

- The **demographic aging**, with deep social and economic consequences, affects the largest part of the developed world. The dependency rate grew as the fertility and mortality rates decreased, the life expectancy increased and the number of emigrant working-age people (together with families) has constantly grown. Among the most important inferences of the demographic ageing for the society and economy become apparent through the dynamics on the labour market, the economic growth potential and the sustainability of the public financing schemes for pensions, health-care and long-term care of the elderly.
- The **globalisation process** with various threats menacing first of all the less developed economies and less advantaged people: higher vulnerability on the labour market, increased long-term unemployment, higher economic insecurity, deepened social inequality and higher exposure and vulnerability to the external environment (economic shocks, crises, etc). Romania has largely experienced the benefits and costs of globalization, with visible consequences for its social dimension.
- Confronted with severe negative impact of the **current economic crisis**, Romania has again demonstrated its vulnerability to globalisation. The national economy hadn't been strengthened enough after the previous shocks. The domestic investment capacity is still low, depending on foreign capital which might be withdrawn. The desindustrialisation of the economy, the low level of human capital development, the propensity to consumption rather than investment, the high level of indebtedness at the company as well as individual levels, the volatility of national currency, of the financial market and the real estate bubbles, together with other strong direct external factors made Romania one of the hardest hit countries among the European member states, and not only.
- Romania has committed to line up to the ambitious **European targets** set for 2020. The Europe 2020 agenda adopted a new approach aimed at helping the Europe out of the current crisis and at laying out the foundations for future development. The last of the three pillars of growth ("smart growth", "sustainable growth", "inclusive growth") an expression of the social dimension of the Europe 2020 strategy, sets also the target of 20 million less people to be at risk of poverty by 2020. The fulfillment of this objectives stays primarily not on the shoulders of the more developed countries, but on the new European member states (such as Romania, Bulgaria, Hungary and Baltic States) with high poverty rates and low income per capita levels, with unstable labour markets, underfinanced health and education systems, high emigration, and most adversely affected by the current economic crisis.
- vulnerability to **poverty**. This social phenomenon is a plague that needs to be integrately addressed as a first concern for the policy makers. Even if the absolute poverty rate has sharply decreased since 2000 (from 35.9% to 7.4% in 2009, (ICCV, 2010)) the inequalities and the relative poverty rate remain rather high. Measured as the share of persons with an equivalised disposable income below the risk-of-poverty threshold, which is set at 60% of the national median equivalised disposable income (after social transfers), the relative poverty indicator reaches, in 2008, about 23% for Romania, the second highest figure in the EU. The Gini index, measuring inequality, at a value of 36, places Romania on the same position (last but one), together with Portugal and Bulgaria.

In 2007, Romania ranked the last concerning the percentage of people whose income was lower than 40% of the national median equivalised disposable income. The same year European statistics showed that almost one third (32 %) of Romania's population had an equivalised disposable income that was less than 70 % of the national median, the highest rate among the Member States.

Bulgaria and Romania had by far the lowest poverty thresholds in 2007, not only considerably lower than the threshold in Luxembourg, but also between five and six times less than the thresholds recorded in Belgium, Denmark, the Netherlands, Ireland, Austria, Cyprus and the United Kingdom

Beyond the population welfare, the issue of poverty directly challenges the *goals of sustainable knowledge-based growth*, which is compulsory for the Romanian economy - and society - survival. Low incomes lead to allotting the largest share of revenues to providing for basic necessities (42% of household available income, on average, in 2007, went for food, housing, health, clothing and shoes, transportation). That means a perpetuated low level of domestic demand for services or products with higher added value. With a population focused on surviving or covering its needs, with a low domestic aggregated demand for knowledge intensive goods and a rather medium-low technologic intensive export structure, there is no available lever for encouraging, and little hope for ensuring, a *future economic development based on knowledge, on research, development, innovation, on highly educated human capital*.

- An effective and efficient social risk management in Romania must also fight the **chronic underfinancing of the public social services**, favoured by a general negative attitude towards the social role of the state, which seems to have been considered more of a necessary evil than as a lever for general equitable welfare. Romanian public spending for social policies represents less than half of the European member states average (16.4%), less than all the European countries that has undergone the transition. Its share in the public budget is also very low: 36.5% compared to the European average, 55.9%, and is probable to be even more shrunked, as a consequence of the current economic crisis.
- The accentuated phenomenon of **migration** within the active population is associated with, beside unquestionable positive outcomes, negative economic and social consequences, such as: accelerated ageing of domestic workforce and of demographic structure, deepened labour deficit for some economic sectors (such as construction, textile or medical sectors), lower economic competitiveness following the important migration rate among highly-educated people in professions with research, development and innovation potential, widened regional and local disparities. Given the current global economic crisis, the diminishing remittances from emigrant workers, which had been very important before 2009 (about 6% of GDP) is expected to deepen the economic deficit. Returning emigrants face the local shrinking labour demand, depending therefore on social assistance or unemployment benefits.
- The social risk management system has to take into consideration **widening disparities** among counties, as, for example, the GDP/capita for Bucharest is 2.2 times higher than the national average and almost 5 times higher than the last ranked counties, Vaslui and Botosani. The gaps between rural and urban development are also high, as statistics show that the share of poor people in the rural area is about 3 times higher than the corresponding fraction of the urban population

- The characteristics and dynamics of the Romanian **labour market** proves itself a spring of social risks that turn into further challenges for the Romanian social risk management. The labour market is highly relevant to the social risk management system, given also those effective labour policies, correlated with education and health policies represent the major mechanism for social inclusion, the major lever for poverty risk exposure reduction, for diminishing the poverty incidence, for regional and national development.

Among the most important social risks and challenges derived from the labour market, we mention *informal occupation, in-household occupation (self-occupied and contributing family members, especially in agricultural households), long-term unemployment, discouragement for entering formal employment, in-work poverty*. The social categories mostly exposed to these risks are the young, the Roma people, the women, residents of the regions with highest at-risk-of-poverty rate and with lowest living standards (North-Est and South-Est), and low-educated and qualified people. When these social characteristics cumulate, the vulnerability to the risks mentioned above is at its highest.

Under the premises of a new world-wide call for solidarity in poverty-reduction and effective social risk management instruments, the welfare state pattern has to move again towards a renewed principle of solidarity, where risk-taking and coping responsibilities are shared and equitably distributed among the various actors (individuals, family, community, government, society as a whole), where the focus stays mainly on reducing vulnerability, preventing risks and enabling individuals to better manage their exposure to risks through higher human capital formation, through wider access to information and opportunities, through less inequality and better social protection.

3.2. System of SRM indicators specific to Romania

An SRM based integrated approach of the Romanian social policy remains yet to be taken. There have been taken multiple and, more or less, successful public measures for preventing the occurrence of various social risks within specifically targeted groups, for diminishing exposure, vulnerability or impact level. But they have been mostly disparate actions, unintegrated within a coherent and synergic system.

Adapting the consecrated social risk classification (proposed by Holzmann, Jorgensen, 1999) after their main sources, we have identified the major risks that threaten Romanian citizens and corresponding main available management instruments (see table 3)

Following the methodological principles presented in previous chapters, an indicators table was drawn (Tables 4 – 9). As it doesn't approach one specific risk, but the overall picture of the social risks in Romania, this paper intends to delineate a system of indicator categories rather than of individual indicators. They should be further detailed, singularized and adapted for each risk type and instrument. Most of them are derived from other primary indicators, un-mentioned in this paper which, given the high complexity level and time resource restrictions, it is meant to be only a rough guide to the matter. It is certainly not exhaustive, there is enough room for improvement, yet the author is confident that it might represent a starting point for further research and development of the challenge.

4. Conclusions

The imperious need of an integrated, dynamic, holistic, flexible and multidimensional system of socio-economic indicators for an effective strategic process of social risk management design has been proved unquestionable. It is, also, a fact that, in the current circumstances and in the context of foreseen socio-economic evolutions, it is high time that the Romanian social policy makers undertake the risk management outlook on the social risks issue, with its focus on preventive management strategy, responsibility sharing, enabling individuals and society for a better risk management.

This paper's attempt to approach the less covered issue of the SRM literature regarding the social indicators system for social risk management, even if opportune, has proved difficult, due to the intricate web of casual relationships between risks, risk factors, outcomes. In our vision, any further work on detailing the social indicators system for the management of a specific given risk (class of risks) would be extremely welcome, as it would pave the road to a systematic SRM approach of social policy.

Moreover, even if *poverty* is the most severe outcome common to most of the social risks, rather than a social risk in the traditional understanding of the concept, it is a social phenomenon that represents a real risk for the social and economic sustainable development of the Romanian society. Thus, a social risk management approach of poverty, based on specific social indicators system, would be not only possible, but very much welcome.

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Table 3. Main social risks in Romania

Social Risks	Type of Risk	Potential Outcome	Available risk management instruments / Type of instrument					
			Ex-ante			Ex-post		
			Risk Prevention/ exposure		Risk Mitigation		Risk Coping	
Natural								
Floods	regional / national Covariate	Loss of household, productive, financial, natural assets, livestock, food stocks, valuable goods, death Community isolation Higher social spending Increase in food prices, poverty / at-risk-of-poverty	Dam building Relocation	Pb. Pv.Inf.	Provisional dams Evacuation of households and assets Investm. in social capital Insurance of assets Encouraging insurance	Pb. Pv.Inf./Pb Pv. Inf. Pv.F Pb/ Pv.Inf	Family / community arrangements Public and private social assistance – (housing, basic necessities, recovering assets) Migration Subsidies	Pv.inf. Pb., Pv.F Pv.Inf.
Droughts	regional / national Covariate	(temporary) loss of income Increase in food prices Food shortage, poverty	Irrigation systems Good weather forecasting	Pv.Inf/F, Pb. Pb.	Crop diversification (Risk div.) Crop insurance Encouraging insurance Crop Stocks	Pv. Inf. Pv.F. (Pb) Pb Pv.Inf/Pb	Financial assistance Subsidies Social assistance	Pb Pb Pb/Pv.F
Earthquakes	Regional covariate	Loss of assets, death, poverty	Anti-seismic fortific. in vulnerable areas	Pr F/ Pb	Seismic shelters House insurance	Pb./ Pv.Inf	Public/private intervention, social assistance and health care	Pb/Pv.F
Landslides	Idiosyncratic / regional Covariate	Loss of natural, physical assets (housing, etc.) poverty	Fortification Re-forestation Relocation	Pv.Inf./Pb. Pb. Pb. Inf.			Informal/Family Arrangements Social assistance	Pv.Inf. Pb., Pv.F

Social Risks	Type of Risk	Potential Outcome	Available risk management instruments / Type of instrument					
			Ex-ante			Ex-post		
			Risk / risk exposure reduction		Risk Mitigation		Risk Coping	
Health Illness Accident Injury Low access to quality health care	Idiosync-ratic events Regional cov.	Temp/Perm. Work inability, loss of income, loss of human capital, disability, higher health public and private expenditures, poverty, social exclusion, family breakup, death	Preventive act. Healthy lifestyle Responsible behavior Education Public Health policies	Pv.in f / Pv.F. Pb	Health insurance (private/public) Access to health care Invest. In Social Capital Public Emergency services First-aid Educat.	Pv.F/Pb Pv.Inf Pb Pv.Inf/F/Pb	Public/Private Health services Public/Private Social Assist. Legal provisions protecting employees	Pb /Pr F. Pb/Pv. F Pb
Disability – perm/temp	Idiosync-ratic		Good health care habits	Pr Inf.	Health insurance	Pr F/Pb	Private/Public long-term care Social Assist.	Pv.Inf/ F/ Pb
Epidemic	Reg/nat Cov	Worsened population health, Increase in public health expenditures	Public Health Policies (pop. Vaccination) health Education	Pb, Pv.F.	Health Education for Population, ensuring drug availability Medical/Biological RDI	Pb	Isolation of infected comm., Treatment, health care	Pb/ Pv.F.
Life-cycle Birth Congenital illness Stunted development Child malnutrition Low education Low income Family breakup Old age Death	Idiosync-ratic Covariate – disadv. social groups	Illness, Disability, Social exclusion, deepened poverty, poverty perpetuation, low human capital development, (long-term) unemployment, informal employment	Ensured access to good health care services Social assistance to vulnerable gr. Compulsory public education Labour market policies & instr. Education, access of the public to information	Pb./ Pv.F	Public health care services (access to) Child protection and care policies Ensured access to social services infrastructure Active policies on labour market (trainings, etc) Pension systems	Pb / Pv.F	Health care, Social assistance, Social transfers, Guaranteed min. income, Child protection and care policies Policies on the labour market Family arr.	Pb / Pv.F Pv.

Social Risks	Type of Risk	Potential Outcome	Available risk management instruments / Type of instrument					
			Ex-ante			Ex-post		
			Risk / risk exposure reduction		Risk Mitigation		Risk Coping	
Economic Harvest failure	Id./Cov	Loss of income, over-indebtedness, loss of assets, higher at-risk-of-poverty rates, poverty, low quality of life, health deterioration, family break-up, low human capital development, over-burdened public social assist. Schemes	Less risky prod. New technology	Pv. Inf Pv.F	Crop Insurance Financial literacy Risk spreading	Pv.F. Pv.Inf./ Pb	Sell of assets Borrowing Social arr. Subsidizing	Pv. Inf. Pv. Inf/F Pv. Inf Pb
Business failure	Id.		Sustained research, development and technologic/management innovation Preventive strategies	Pv. F.	Risk spreading Risk sharing Financial literacy	Pv inf./Pv F.	Sell of assets Borrowing Liquidation strategy	Pv F.
Loss of financial assets			Financial literacy Risk coverage	Pv F	Financial Risk mitigation strategies	Pv. Inf/F.		
Unemployment (and long-term)	Id/Cov		Multiple jobs; Investment in dev. human capital (long-life-learning opp.) Labour market public policies Rules and regulations	Pv. inf. Pv inf./ Pv.F/ Pb. Pb	Ensuring eligibility to unemployment benefits schemes; Rules and regulations reg. labour standards Labour mk. Policy Skills and knowledge diversification; Savings	Pv F. Pv inf./Pv.F/ Pb	Unemployment benefits schemes Informal occupation Active search for another job Informal social arrangements Labor Mk. Policy Severe penalties for employers	Pb Pv. Inf. Pv.Inf/F/ Pb Pv. Inf. Pb
Underemployment	Id							
Informal empl.	Id/Cov							
In-work poverty	Id / Cov							
Improper jobs	Id							
Over-employment	Id/Cov							

Economic/financial crisis	Cov (N)	Business failures, Loss of public and private revenues Loss of assets (financial, human, social, productive), Unbalanced labour market, Shrunk public and private budget for social services, Austerity policies, Deflation, diminishing aggregate demand Deepened poverty, Higher of at-risk-of-poverty rates	Sound macroeconomic policies Regulated and supervised financial market Securing jobs in sectors less vulnerable to ec.crisis Savings	Pb Pb Pv. Inf/ Pv.F/ Pv.Inf.	Good international political and commercial terms Developing political capacity to crisis management Savings	Pb Pv F/Inf.	Crisis management strategies, Austerity policies National indebtedness Sell of assets, diminished consumption basket Borrowing	Pb Pb Pb Pv. Inf. Pv. Inf/F
Higher country risk	Cov (N)	Foreign capital withdrawal and less new FDI, raising unemployment, currency crisis	Sound macroeconomic policies; Observing international commitments and agreements	Pb	Securing multiple external assistance sources	Pb	Reinforced international agreements	Pb
Currency crisis	Cov (N)	Loss of financial assets, higher indebtedness, deterioration of trade balance, loss in purchase power	Good currency policy, Good macroeconomic policies	Pb	Currency Risk coverage Savings in Foreign Currency	Pv.F Pv F./Inf.	Crisis management policy (monetary, financial)	Pb

Social Risks	Type of Risk	Potential Outcome	Available risk management instruments / Type of instrument															
			Ex-ante			Ex-post												
			Risk / risk exposure reduction		Risk Mitigation		Risk Coping											
Socio-Political Crime	Id	Loss of assets, injury, illness	Self-protection measures	Pv. Inf.	Legal and political room for effective public authorities intervention	Pb	Applied penal law	Pb										
			Societal constraints and penalties	Pb					Effective and fair juridical system	Pb	Vindication, loss recovery	Pb						
		Effective civil, penal laws		Private Insurance			Effective intervention of public authorities											
			Public services of individual/community protection			Pv Inf/F Pv F												
Domestic violence	Id	Injury, illness, disability, family breakup	Promotion of good societal and familial values	Pb inf/ F	Ensuring easy access to institutions that provide shelter, assistance, help	Pb/PvF	Social assistance services	Pb/PvF										
			Surveillance of the vulnerable through local social assistance	Pb F/ Pv inf					Legal provisions anti-domestic violence	Pb	Applied legal provisions (with preventive role as well)	Pb						
			Fighting gender discrimination	Pb/Pv Inf/F									Investment in social capital – ensuring community and family support	Pv inf.	Social private arrangements	Pv inf		
			Re-enforcement of children rights	Pb													Family breakup	Pv F/inf.
			Discouragement of habits that favour domestic violence.	Pb/Pv Inf/F														
			Legal provisions for domestic violence	Pb														
Investment in social capital	Pv. Inf.																	

Social upheaval	Cov nat	Crime, violence, Suspended social programmes Economic and political crisis	Sound social policies Communication and transparence at the public level Genuine interest for general public welfare No Corruption	Pb Pb Inf Pb Inf Pb	Design of social crisis management strategies	Pb	Negotiation Military /police intervention	Pb Pb
Ethnic civil tensions	Cov- reg/nat	Social upheaval, social and political turbulence	Good minority policies, fight against ethnic discrimination Indirect instruments for better ethnic cohesion Neutralisation of potential conflict sources	Pb Pb Pb inf.	Design of social crisis management strategies	Pb	Successful mediation Neutralisation of conflict sources	Pb Pb
Ethnic discrimination	Cov reg/nat	Higher vulnerability to most social risks	Good minority policies, legal provisions against ethnic discrimination Public censure of ethnic discrimination	Pb Pb inf/F	Well designed legal instruments for discouraging discrimination	Pb	Policy instruments of positive- discrimination Legal penalty for trespassers	Pb
Political default on social programs and on the management of current economic crisis	Cov	Inefficient public money spending Deepened and widened vulnerability More severe risk outcome Unsustainable social protection schemes and policies Social upheavals, Higher poverty rates and at-risk-of-	Strongly substantiated political decisions (based on ex-ante impact studies) Integrated policy design Long-term thinking Working for the benefit of the whole society Sustainable development vision Civil society censure	PB Pv F	Alternative strategic thinking – alternative solutions Private arrangements for risk management	Pb Pv F/Inf	Openness to external assistance New policies with competent people Democratic call for new political leaders	Pb Pb Pv inf/f

		poverty rates	International transparence					
Environmental Air, River / sea pollution	Reg. Cov	Unsustainable development	Effective legal provisions for environmental protection – good standards enforced by law	PB	Effective legal provisions for environmental protection (ex. “The polluter pays” principle)	Pb	Compensation from the polluter	Pb
De-forestation	Reg/nat Cov	Desertification					Re-forestation	PbF/PvF
Disregard/destruction of eco-systems	Reg/nat Cov	Loss of natural, touristic capital					New technology for	Pb
Deficient waste management	Reg/nat Cov	Public health problems International exclusion	Societal values pro- environment Raising public awareness	Pb inf Pv F Pb inf Pv F	Heavy consequences for polluters	Pb	neutralization of the impact	

Pv. Inf. – private, informal instrument

Pv.F – private, formal instrument

PB – public instrument (PB Inf – public, informal)

Reg./nat. Cov – Covariate event with national/regional coverage

Id – idiosyncratic event

Building the above picture of the major social risks confronting the Romanian society as a whole, or its individuals, has been a difficult task given the very high interdependence and the complex causality relationships between the various risks.

Table 4. Relevant Indicators for NATURAL sources of Social Risks: Floods, Droughts, Earthquakes, Landslides

No.	Indicator / Indicator Category (relevant to all risks)	Data Source	
Risk identification and prioritization (Risk occurrence, coverage, outcome)			
I. 1	Number of events along the last 5-10 years/exposed region (for each risk)	Main primary data sources: National Institute for Hidrology and Water Management; National Institute for Earth Physics, Local/County public administration institutions of exposed geographic areas.	
I. 2	Number of individuals/households exposed to the risk by relevant social, economic or demographic criteria		
I. 3	Number of additional in-poverty individuals/households following the risk occurrence		
I. 4	Number of additional vulnerable to poverty individuals/households, as a consequence of the risk occurrence		
I. 5	Estimated value of losses – for the previous events		
I. 6	Estimated value of potential losses (scenarios) following future events		
Relevant indicators for designing risk PREVENTION strategies			
P. 1	Estimated public spending for preventive management instruments (for every identified alternative);		
P. 2	(Social gain) ratio between the value of potential losses and public spending for risk prevention;		
P. 3	(Public Budget Gain) ratio between the estimated value of public spending for risk coping instruments (social assistance, social transfers etc) and the estimated value of public spending for risk prevention alternatives.		
Relevant indicators for designing risk MITIGATION strategies			
M. 1	Share of households that can afford any adequate private risk mitigation instruments in the total exposed households		
M.2	Share of households that benefit from adequate private risk mitigation instruments in the total exposed households		
M.3	Avoided Potential losses as a result of mitigation strategies implementation – for every identified alternative		
M.4	Ratio between avoided potential losses and total potential losses		
M.5	Ratio between avoided potential losses and public spending with risk mitigation instruments		
M.6	(For avoidable risks: floods, landslides) Ratio between estimations of public spending for prevention measures and public spending for mitigation measures		
M.7	Share of households that can afford any adequate private risk mitigation instruments in the total exposed households		
Relevant indicators for designing risk COPING strategies			
C. 1	Estimated public spending for risk coping measures		
C.2	Estimated total potential loss		
C.3	Estimated value of private / international assistance (based on historic evidence)		

Table 5. Relevant Indicators for HEALTH related RISKS: Illness (I), Accident (A), Injury (Ij), Low access to quality health care (L), Permanent / Temporary Disability (P/T D), Epidemy (E)

No.	Indicator / Indicator Category	Data Source ²	Risk
Risk identification and prioritization (Risk occurrence, coverage, outcome)			
I.1	New cases of illness per 100000 inhabitants by disease classes (see footnote 2)	INS (e)	I/A/Ij/E
I.2	Hospital discharges by diagnosis, in-patients, by sex and regions	Eurostat (e) MS	I/A/Ij/E
I.3	Deaths and mortality rates by death causes ³ , by macroregion, development region, county	INS (partial e) MS	I/A/Ij/E
I.4	Infant Deaths by age group, by cause of death	INS (e)	I/A/Ij/E
I.5	Number of persons with disabilities by level of disability	ANPH	P/TD
I.6	Number of institutionalized / non-institutionalized disabled people by age group, county, area ⁴ , sex, level of disability, total children, total adults	MMSSF (e)	P/T D
I.7	Annual number of persons involved in accidents by type of accident	MAI, MMSSF, MS (p)	A
I.8	Estimated value of public health expenditure per patient by disease class	MS (p)	I
I.9	Incidence of bribes (“attentions”) – informal payment for medical services, by region, by tyoe of medical service	MS survey p	L
I.10	Complaints of medical care conditioned by informal payment	MS p	L
M1, M2, C11, C12			L
Relevant indicators for designing risk PREVENTION strategies (target group id., current performance, etc)			
P.1	Indicators for identification and prioritization of major <i>risk factors</i> for each identified risk		All risks
P.2	Healthy life years at birth, at 65 year age threshold	Eurostat (e)	I, context
P.3	Healthy life years by socio-economic status	ECHIM	I, context
P.4	Number of persons exposed to identified risk factors – by relevant demographic, economic, social criteria		I/A/Ij/E/L
P.5	Share of persons with health destructive life-style (bad habits such as: daily smoking, alcohol drinking, unbalanced diets, disordered meals taking, lack of regular physical training, etc) – by age group, area, region	INS, MS (surveys)	I, A, P/TD
P.6	Annual percentage growth of risk incidence/occurrence	MS, etc	All risks

² Potential sources for indicators not yet calculated (p), or Effective sources (e) for existent, or in process of execution, indicators

³ Infectious / parasitic diseases, chronic diseases, neoplasms, nutrition/metabolic diseases, malformations, pregnancy, birth, traumas, external caused deaths

⁴ “Area” in the paper’s tables represents the residential area – rural or urban

P.7	Estimated public spending for curative treatment per patient, by (preventable) health risk	MS (p)	I, E
P.8	NPV (Net present value) of future public spending for curative treatment for preventable chronic disease	MS (p)	I, P/TD
P.9	Ratio between the NPV of public spending for curative treatment and estimated public spending for specific prevention measures.		I, P/TD
P.10	Success rate of prevention measures: Percentage decrease of risk occurrence following a given prevention strategy: ratio between the decrease of new cases of illness and previous number of affected people (performance of actual instruments and strategies)	MS (p)	All risks
P.11	Percentage decrease of <i>risk factor</i> occurrence as a consequence of a given preventive measure	MS (p)	All risks
P.12	Number of persons involved in different types of accidents, according to various socio-demographic criteria	MAI/MMSSF	A
P.13	Annual number of inspections on employers compliance with safety at work regulations	MMSSF	A
P.14	Annual expenditure for inspections / number and value of annual fines and penalties for contraventions regarding <i>safety at work</i> regulations	MMSSF	A
P.15	Success rate of previous preventive measures: percentage decrease of accidents as a consequence to the implementation of a specific measure	Initiator	All risks
P.16	Estimated public funds needed for specific prevention programmes (education, information of the public, vaccinations, inspections)	Initiator	All risks
P.17	Ratio between estimated public spending for risk prevention and estimated success rate (estimated money needed for a decrease by 1% of the risk occurrence)	Initiator	All risks
P.18	Public spending for health factor risks prevention per capita	MS (p)	All risks
P.19	Share of public spending for health factor risks prevention in total public health expenditure	MS (p)	All risks
Relevant indicators for designing risk MITIGATION strategies			
M.1	Share of population uncovered by mandate/private health insurance / by socio-demographic criteria (area, region, ethnic group)	MS (p)	I, A, Ij, L
M.2	Share of population with difficult access to health care units / health care services/ by socio-demographic criteria	MS survey(p)	L
M.3	Incidence of health risks within the least insurance covered socio-demographic groups	MS (p)	I/A/Ij/L/E
M.4	Number of researchers in public Medical/ biological Research labs, institutions	MS (p)	I, E
M.5	Ratio of the annual number of cases of illness that require hospitalization to the number of beds from sanitary units, by county, by medical specialty	MS (p)	
M.6	Emergency services, in the units with state majority ownership	MS (p)	I/A/Ij/L/E
M.7	Average ambulance arrival time per emergency call (SMURD/SAMB)	MS (p)	I/A/Ij/L/E
M.8	Medical staff wages (by medical staff type) compared to gross average income / salaries in European countries	INS, MS (p)	I/A/Ij/L/E
Relevant indicators for designing risk COPING strategies			
C.1	Annual percentage growth of risk incidence/occurrence	MS (p)	All risks
C.2	Share of persons having a long-standing illness or health problem, by sex, age, educational level, income quintile (%)	Eurostat (e)	I, P/TD

C.3	Number of beneficiaries of allowance for adults with severe and accentuated disabilities	ANPH (e)	P/TD
C.4	Social protection expenditure for disabled people (share in GDP/social protection expenditure)	MMSSF (e)	P/TD
C.5	In-patient average length of stay (ISHMT, in days)	Eurostat (e)	Public Health System (PHS)
C.6	Hospital days of in-patients	Eurostat (e)	
C.7	Main surgical operations and procedures performed in hospitals (ICD-9-CM)	Eurostat (e)	
C.8	Estimated costs for medical treatment of the risk-affected persons (hospitalization, compensated prescriptions, ambulance, etc)	MS (p)	
C.9	Total health care expenditure per capita / total health care expenditure as a % of GDP	MS, INS (p)	
C.10	Total long-term health care expenditure as a percentage of GDP	MS, INS (p)	
C.11	Self-reported unmet need for medical care	Eurostat (e)	PHS, L
C.12	Share of population complaining of low quality health services	MS survey(p)	PHS, L
I.9, I.10, M.8 (trends)			PHS L
C.13	Number of physicians, hospital beds, sanitary staff, hospital units, drug stores per 1000 inhabitants – by area/county/development region	MS (e,p)	PHS
C.14	Physicians by medical specialty	Eurostat, MS	PHS, All risks
C.15	Number of medical services beneficiaries by county, sex, age group, area	MMSF MS	PHS

Table 6. LIFE-CYCLE related RISKS Indicators: Birth (B), Congenital illness (Ci), Stunted development (Sd), Child malnutrition, and material deprivation (Cm), Low education (LE), Low income (LI), Family breakup (F), Old age (O), Death (D)

No.	Indicator / Indicator Category	Data Source	Risk
Risk identification and prioritization (Risk occurrence, coverage, outcome)			
I.1	Perinatal mortality by death cause	MS (e)	B, Ci
I.2	Number of births unassisted by qualified medical staff	MS p	B, Ci
I.3	Share of mothers complaining of quality/appropriateness of medical care at birth	MS survey p	C
I.4	Percentage of underweight children by age group	MMSSF p	Sd, Cm
I.5	Annual number of congenitally disabled children		Ci
I.6	Shares of Persons aged 65 + / Dependent children living in GMI supported families		Cm, LI, O
I.7	Shares of Persons aged 65+ / Dependent children living in extreme / relative poverty, severe material deprivation		Cm, LI, O
I.8	Child wellbeing	Eurostat (e)	Cm
I.9	Share of Early school leavers in total children of school age	Eurostat, MECTS	LE, LI
I.10	Divorces, by number of under age children remained through marriage dissolution, by development region, county	INS, MMSSF	F
I.11	Population at-risk-of-poverty/ in absolute poverty / in extreme poverty by socio-demographic and employment status criteria		LI
Relevant indicators for designing risk PREVENTION strategies (vulnerable group id., current performance, etc)			
P.1	Number of births unassisted by qualified medical staff	MS (p)	B, Ci
P.2	Share of mothers complaining of quality/appropriateness of medical care at birth by complaint issue, by county, income quintile	MS/MMSSF survey (p)	B, Ci
P.3	Life expectancy at birth/ age 65 by residential area, sex, type of household	Eurostat (e), MS/MMSSF surveys (p)	O
P.4	Incidence of relative/extreme poverty / material deprivation in dependent children by region, area, household type, ethnic groups	MMSSF (p), Town halls	Cm
P.5	Incidence of relative/extreme poverty / material deprivation in old aged (65+) by sex, region, area, household type	MMSSF (p), Town halls	O
P.6	Number of abandoned children – in hospital / care centers	MMSSF, MS	Sd Cm
P.7	Expenditures with child protection and care programmes (% of NNI)	(OECD)	Cm

P.8	Number of children victims of domestic violence by type of household, income level of household	ANPDC ⁵ , ANPF, MAI	F, Cm
P.9	Overcrowding rate for children / old people	eurostat, MMSSF e	Cm, O
P.10	Number of children benefiting of preventing activities by county, sex, age groups, type of programme	MMSSF p	Cm
P.11	Share of old persons under family care in total old persons by county, area, region, household	Eurostat MMSSF e	O
P.12	Number of working children by development region, sex, age group, area (working children between 5-11 years of age / 12-14 old working children, except for “easy tasks”; 15-17 old children performing dangerous, destructive work)	MMSSF (e)	Cm
P.13	Early school leavers by household type, area, region, sex, ethnic minority	Eurostat (e)– MMSSF, MECTS (p)	LE, LI
P.14	Enrollment rate in school for each educational level by sex, area, ethnic group, household type	MECTS, (p) Town Halls	LE, LI
P.15	Expenditures with education programmes (%NNI) – preschool, primary, secondary, highschool	(OECD)	LE
P.16	Total expenditure with education in GDP	(OECD)	LE
P.17	Cumulated educational spending vs PISA maths scores	(OECD)	LE
P.18	Share of low-educated people – by age group, sex, area	INS e	LE
P.19	Long-term unemployment incidence	INS e	LI
P.20	Ratio of young unemployed in total young people		LI
P.21	Number of people quitting work because of family responsibilities	INS (p)	LI
P.22	Informal employment indicators		LI
P.23	Population at-risk-of-poverty/ in absolute poverty / in extreme poverty by socio-demographic and employment status criteria		LI
Relevant indicators for designing risk MITIGATION strategies			
M.1	Social protection expenditure for family and children by county, type of benefits, type of expenditure	MMSSF e	Cm, F
M.2	At-risk-of-poverty pensioners (adequacy of old age insurance)	MMSSF e	O
M.3	Social assistance programmes for children and old aged, % of total public social expenditures	MMSSF p	Cm, O
M.4	Average Replacement ratio for retiring by type of pension, area	MMSSF	O
M.5	At risk of poverty rate / in absolute poverty rate before and after social transfers by type of social transfer	MMSSF e	LI

⁵ ANPDC (National Agency for Child Rights Protection), ANPF (National Agency for Family Protection), ANPH (National Agency for disabled protection) under process of being absorbed as Direction within the Ministry of Labour, Social Solidarity and Family (MMSSF)

M.6	Expenditure for / coverage of social programmes for children and families (allowance for new born children, allowance for raising children up to 2/3 years old, etc)	MMSSF p	Cm
M.7	Coverage, expenditure (%) and performance indicators for social protection programmes for vulnerable to poverty individuals/families	MMSSF e	LI
M.8	Coverage, expenditure and performance indicators for employment active programmes (vocational training, long-life learning, etc)	MMSSF e	LE LI
M.9	Coverage, expenditure and performance indicators for programmes fighting early-school leaving (money for highschool, social scholarships, child allowance, etc.)	MECTS, MESSF e	LE
Relevant indicators for designing risk COPING strategies			
C.1	Perinatal mortality by death cause	Eurostat MS e	Cm, Cd
C.2	Share of mothers complaining of quality/appropriateness of medical care at birth total, by complaint type	MS survey (p)	B
C.3	% of dependent children living in extreme / relative poverty, before and after targeted social transfers	MMSSF p	Cm
C.4	Share of congenitally disabled children living in households at risk of poverty	MMSSF/ ANPH p	Cd
C.5	Share of abandoned children reintegrated in their own families/in adoptive families in total abandoned	ANPDC e	Cm Sd
C.6	Old persons aged 65+ / Dependent children in severe material deprivation	MMSSF	O, Cm
C.7	Coverage of programmes of social transfer to at-risk-of-poverty families with children	MMSSF e	Cm
C.8	Number of children benefiting of social programmes (baked roll and mild; money for high-school, writing materials)	MECTS e	Cm
C.9	Persons aged 65+ / children benefiting from Social Catering programs by county/region, area	MMSSF e	Cm, O
C.10	Share of socially disadvantaged children enrolled in education in total disadvantaged children (with special needs, blind, disabled, HIV infected, etc)	MMSSF e	LE, Sd, Cm
C.11	Enrollment rate in school for each educational level by sex, area, ethnic group, household type	MEC, MMSSF p	LE
C.12	Number of children victims of domestic violence by type of household, income level of household	ANPDC ⁴ , ANPF, MAI	F
C.13	Share of social protection expenditure for family and children in total public social expenditures by county, region	MMSSF p	Cm
C.14	Share of social protection expenditure for family and children in GDP	MMSSF p	Cm
C.15	Number of elderly benefiting of public care and assistance by county, age group, sex, area	MMSSF p	O
C.16	Number of centres for old people (asylums)	MMSSF e	O
C.17	Average monthly cost for elderly assistance in asylums	MMSSF e	O
C.18	Number of employees in social services for old people	MMSSF e	O
C.19	Expenditures with assistance programmes for old people	MMSSF e	O
C.20	Number of demands for social/medical assistance of elderly in waiting	MMSSF p	O
C.21	Poverty rate before and after social transfers		LI

C.22	Coverage, expenditure and performance indicators for social protection programmes for vulnerable to poverty individuals/families	MMSSFe	LI
C.23	Coverage, expenditure and performance indicators for employment active programmes (vocational training, long-life learning, graduates employment subsidies etc)	MMSSF e	LE, LI
C.24	At risk of poverty share of people benefiting of successor pension	MMSSF p	LI, D

Table 7. ECONOMIC related RISKS Indicators : Harvest failure, Business failure, (H-B) loss of financial assets (Fin), Labor market risks (LM) (unemployment under/over employment, informal employment, in-work poverty, improper jobs), Economic financial crisis (Ec), Higher country risk (Cr), Currency crisis (Cc)

No.	Indicator / Indicator Category	Data Source	Risk
Risk identification and prioritization (Risk occurrence, coverage, outcome)			
I.1	Annual share of harvest failure (ha) in total national plantation (ha)		H-B
I.2	Value of annual share of harvest failure by failure cause, by region		
I.3	Annual number / share/ growth rate of bankrupt companies	INS e	
I.4	Annual Number / share/ growth rate of unemployed because of bankruptcy	INS p	
I.5	ILO unemployment rate	INS	LM
I.6	Ratio of long-term unemployment in total unemployment	INS	
I.7	Rate of in-work poverty	Eurostat INS e	
I.8	Estimated share / number of informal workers (undeclared)	ILO, eurostat, other estima.	
I.9	Over-employment rate	INS e	
I.10	Underemployment rate	INS e	
I.11	Impact indicators (e.g. Increase in of poverty/unemployment indicators because of 1% negative growth rate of GDP)		Ec
I.12	Estimated value of foreign capital withdrawal / Estimated value of lost FDI	ARIS	Cr
I.13	Indicators assessing the impact of Cr on the national currency, consequences		
Relevant indicators for designing risk PREVENTION strategies (vulnerable group id., current performance, etc)			
P.1	Annual share of harvest failure (ha) in total national plantation (ha) by failure cause, by type of crop, by region		H-B
P.2	Annual number / share/ growth rate of bankrupt companies by economic sector, by size, by region	MECMA	
P.3	Annual number of people investing in financial assets	BVB	
P.4	Number / dynamic / value of Stock exchange market transactions	BVB	
P.5	Indicators for risk factors incidence, coverage		
P.6	Employment rate by age groups, sex, educational level, regions, area	INS e	LM
P.7	Low-paid employees by area, sex, educational level, age group (income quintile by sex, area, education, age group)	INS p	
P.8	ILO unemployment rate by socio-demographic criteria (age, educational level, sex, area, regions)	MMSSF	
P.9	Long-term ILO unemployment rate by socio-demographic criteria	MMSSF	
P.10	Rate of Early school leaving by educational level and by area, age, sex, ethnic group	MMSSF e	
P.11	Rate of adults attaining professional training and education, by age group, region, sex	MMSSF e	
P.12	Share of employed population involved in long life learning	MMSSF e	

P.13	Share of Life long learning expenditure in the labour force expenditure	MMSSF e	
P.14	Average Participant training cost	MMSSF e	
P.15	Expenditure, success rate of preventive programmes (graduates remuneration for employers, vocational trainings, etc)		
P.16	Ratio between expenditure for LM reintegration programmes and unemployment prevention expenditures	MMSSF	
P.17	No. of inspections carried out in the field of labour relations	MMSSF e	
P.18	No. of sanctioned employers in the field of labour relations (regarding legal holidays, supplementary labour, working conditions, etc)	MMSSF e	
P.19	No. / value of annual amount of fines /paid fines in the field of labour relations	MMSSF e	
P.20	Indicators assessing the Solidity and stability of national economy (volume, productivity of labour force, potential for knowledge based economic growth, Trade balance, share of investment in GDP, share of public investment in infrastructure and regional development in GDP)	INS, MECMA	Ec
P.21	Indicators for the economy vulnerability to external shocks (primarily, of integration on the international financial markets)	MECMA INS	
P.22	Number of successful financial contractual arrangements with international financial assistance organizations		Cr
P.23	Macroeconomic indicators	INS MECMA	
Relevant indicators for designing risk MITIGATION strategies			
M.1	Number of crop insurance policies by region	Insurance mkt	H-B
M.2	Share of technologic / management innovative businesses (CIS surveys)	INSe	
M.3	Number of total/private/public - free of charge authorized suppliers of specialized services for employment incentives for labour force / county, development region	MMSSF e	LM
M.4	Number of new created SME/family association/self-employed/ through the NAPE	MMSSF e	
M.5	Number of new created vacancies through NAPE	MMSSF e	
M.6	Persons who attend / accomplished vocational training courses (unemployed / persons who (do not) benefit of free training services / : at the request of interested natural persons, of economic operators, on the basis of researches and programmes of perspective on the labour market OF WHICH employed in activity	MMSSFE	
M.7	Public budget balance (deficit/excess)	INS e	Ec
M.8	Ratio of Public Debt to GDP	INS e	
Relevant Indicators for designing risk COPING strategies			
C.1	Expenditures for unemployed social protection	MMSSF e	LM
C.2	Ratio of expenditure for LM reintegration programmes in total expenditures for unemployed social protection	MMSSF e	
C.3	Share of registered unemployed who have not been receiving counseling or job-search assistance within the first 6, in total registered unemployed	MMSSF e	
C.4	Unemployment trap (%)	Eurostat	

C.5	Inactivity trap (%)	Eurostat
C.6	Low-wage trap (%)	Eurostat
C.7	Tax burden for a low income worker	Eurostat
C.8	Success rate of LM reintegration programmes	MMSSF e
C.9	Share of unemployed protection expenditures in total public expenditures	MMSSF e
C.10	Share of unemployed protection expenditures in GDP	MMSSF e
C.11	Share of expenditures for active employment measures in total public expenditures	MMSSF e
C.12	Social protection expenditures for one unemployed	MMSSF e
C.13	Number of persons employed without the support of local National Agency for Employment	MMSSF e
C.14	The vacancies employment rate through the National Agency for Employment	MMSSF e
C.15	Number of persons benefitting from the NAPE ⁶ by county, development region, and by target groups (graduates, single providers for family, unemployed 45 and over, long term unemployed, young LTE, disabled, Rroma, ex-inmates, graduates post-institutionalized, foreign citizens, exposed to human traffic, refugee, immigrant), of which unemployed	MMSSF e
C.16	Number of persons benefitting from the NAPE by county, development region, and by sex, area, age group	MMSSF e
C.17	Number of persons employed through the accomplishment of the National Action Plan for Employment, by active measures and by county, development region, by target groups	MMSSF e
C.18	Number of persons employed through Special Programmes for Employment in disadvantaged rural areas with high unemployment rate/localities with important number of rroma minority	MMSSF e
C.19	Expenditures for active measures for employment (through NAPE)	MMSSF e
C.20	Share of Expenditures for active measures in Unemployment Assurance Budget	MMSSF e
C.21	Share of Expenditures for active measures in GDP	MMSSF e
C.22	Expenditures for active measures for employment (through NAPE, by type of measure)	MMSSF e
C.23	Expenditures for active measures for employment (through NAPE, by type of measure) per benefiter/ employed benefiter	MMSSF e
C.24	Ratio between expenditures for active measures per employed benefiter and social protection expenditures for one unemployed	MMSSF e
C.25	No. of sanctioned employers in the field of labour relations (regarding legal holidays, supplementary labour, working conditions, etc)	MMSSF e
C.26	No. / annual amount of fines /paid fines in the field of labour relations	MMSSF e
C.27	Annual number of measures taken/executed by the authorities for the identified deviations in the field of labour relations	MMSSF e

⁶ NAPE – National Active Plan for Employment, see Annex 2

C.28	Annual number of employers identified as using undeclared labour force	MMSSF e	
C.29	Annual number of persons identified as practicing undeclared work	MMSSF e	
C.30	Annual number of labour contracts for the identified undeclared workers	MMSSF e	
C.31	Ratio between the number of labour contracts for identified undeclared workers in the total number of identified undeclared workers	MMSSF e	
C.32	Annual number of employers receiving fines for using undeclared labour, the value of fines	MMSSF e	
C.33	Revenues to the Labour Inspection Budget	MMSSF e	
C.34	Share of revenues from fines in total revenues	MMSSF e	
C.35	Total expenditures of the Labour Inspection	MMSSF e	
C.36	Ratio between Revenues from fines and total expenditures of LI	MMSSF e	
C.37	Impact indicators related to the consequences of crisis management alternative instruments (shrinking public budget deficit through higher fiscality, less social public spending, lower wages, public investment in infrastructure and public goods, etc) on public welfare, poverty indicators, vulnerability to social risks		Ec
C.38	Indicators of absorptive capacity for European funds		

Table 8. SOCIO-POLITICAL related RISKS Indicators : Crime, Domestic violence, Social upheaval, Ethnic civil tensions, Ethnic discriminations, Political default on social programs and on the management of current economic crisis

CRIME	No.	Indicator Category / Indicator	SRM strategy	Main Data Source
	1	Incidence of crimes, by type of crime and by region, area (%)	Id, P, C	MAI
	2	Share of crimes by outcome (casualty, injured, material prejudice)	Id, P, C	
	3	Criminal profile (by socio-demographic criteria), by type of crime	P, C	
	4	Goods privately insured by type of goods, by region	M	Insurance market
	5	Number of community policemen per 1000 inhabitants, by area, region, territorial units	P, M	MAI, MJ
	6	Complaints of corruption (dynamic)	P, M, C	
	7	Share of successful investigations	C	
	8	Number of imprisoned criminals, by type of crime	C	
	9	Number of fined criminals, by type of crime	C	
	10	Number / share of recidivists in total released inmates	C	
	11	Share of theft/vandalism investigations with recovered losses / Share of losses recovered in total losses because of crime	C	
12	Socially reintegrated ex inmates	C, P		

DOMESTIC VIOLENCE	1	Number of acts of violence in families by region, area, type of household	Id, P, C	ANPF, MAI (e)
	2	Number of victims of domestic violence, by victim age group, sex, ethnic group	Id, P, C	
	3	Number of hospitalized victims of domestic violence	Id, P, C	
	4	Number of centers for preventing and fighting domestic violence by region, county, area	P, C	
	5	Number of domestic violence acts in monitored families	M, C	
	6	Number of shelters for domestic violence victims by region, county, area	C	
	7	Number of victims sheltered	C	
	8	Average annual duration for victims staying in shelters	C	
	9	Average spending for shelter per victim	P,C	
	10	Number of counseled aggressors	P, C	
	11	Share of recidivist counseled aggressor		
SOCIAL UPHEAVAL		Indicators specific to each of the social tension key factors whose interaction determines the level of social tension and the threat of mass unrest⁷:		
	1	Conditions of life	P	MAPN, MAI, and Various public and civil institution assessment reports and estimates
	2	Attitudes towards authority		
	3	Social activity		
	4	The presence of leaders		
	5	Ethnic relations		
	6	Index of perceived transparence, goodwill, openness, solidarity and empathy of public institutions and political leaders, by region		
	7	Number of good professional mediators	M,C	
	8	Number of good professional negotiators	M,C	
	9	Number of informal information flows with (potential) insurgents	M,C	
	10	Number of human resources for restoring public order	C	
11	Number of victims/ value of material loss for each strategic alternative	C		

⁷ *Methods for measuring the social tensions in the region*, May 11, 2010, www.interviewconsulting.com

ETHNIC CIVIL TENSION	1	Share of ethnic minorities in total population by various territorial units (microregion, county, city)	Id, P	INSp
	2	Annual growth rate of ethnic civil altercation / conflict by intensity (no. of people involved, damages, etc.), by region	Id, P, C	MAIp
	3	Annual number of ethnic civil conflicts by involved people socio-demographic criteria	Id, P, C	
	4	Number of available public order agents by exposed region	M, C	
	5	Number of arrested people – by sanction given	C	
	6	Number of recidivists by exposed region	C	
	7	Number, frequency, coverage, success rate of regional inter-ethnic mediation programmes / by exposed region	P	
	8	Number, frequency, coverage, success rate of regional inter-ethnic cohesion programmes / by exposed region	P	
ETHNIC DISCRIMINATION	1	Number of complaints of ethnic discrimination deeds in civil life, labour relations	Id, P, C	
	2	Number of sanctions for ethnic discrimination, by region, transgressor profile, penalty type	Id, M, C	MJ
	3	Wage disparities by ethnic status	P	INS
	4	Unemployment rate by ethnic status	P	
	5	Number of legal provisions against ethnic discrimination	M	MMSSF
	6	Number, coverage, success rate of programmes against ethnic discrimination	P	
	7	Number, coverage, success rates of ethnic positive discrimination instruments by exposed region	P	
POLITICAL DEFAULT ON SOCIAL PROGRAMMES AND ON THE MANAGEMENT OF CURRENT CRISIS	1	Sustainability indicators for every sub-system of the public social protection (health system, pension system, social assistance and inclusion) based on scenarios (pension system dependency ratio, etc)	Id, P	Public institutions managing the public social protection systems
	2	Adequacy indicators for the sub-systems of the public social protection (at risk of poverty rates for people benefiting from social transfers, unmet need of medical care, share of people benefiting of risk preventive programmes in total persons / total vulnerable persons, etc)	Id, P	
	3	Public Indebtedness capacity	M	
	4	Public debt, current and projected up to 2050, % of GDP	M	
	5	Indicators for estimated social impact of economic crisis management measures by vulnerable social groups (e.g. relative /absolute poverty rate growth as a consequence of pensions fiscal taxation (by 16%) / of decreasing public employees' wages by 25%, etc; unemployment growth rate as a consequence of VAT increase, of massive public staff discharge)	Id, P, C	Involved Ministries Eurostat
	6	Indicators for estimated effectiveness of the risk coping programmes designed for the most severely affected people (by unemployment, income decrease, poverty, etc)	C	
	7	Efficiency indicators for alternative strategies	C	
	8	Annual growth rate of national absorptive capacity for European Funds / per programme, development region	M,C	

Table 9. ENVIRONMENTAL related risks Indicators

Air/ river / sea pollution	1	Number of air / river / sea pollutive acts/ accidents by region, by pollutant type, pollution severity degree	Id, P, C	MMP MDRT
	2	Number of individuals / households adversely affected by pollutive deeds, by kind and value of asset loss / number of injured, hospitalized people/in-patient day care by region	Id, P, C	
	3	Annual number and value of fines for pollutive deeds	P,M,C	
	4	Share of recovered/compensated social loss	C	
De-forestations	1	Surface of accidental / unplanned (illegal) deforestation	Id, P	
	2	Annual number and value of fines for illegal deforestation	M, C	
	3	Annual number of fined/penalized negligent or corrupted foresters	P, M,C	
	4	Ratio of foresters wage to minimum/average gross salary per economy	M	
	5	Annual growth rate of desertification (due to deforestation)	Id	
	6	Number/surface of areas exposed to landsliding due to deforestation	Id, P	
Destruction of eco-systems	1	Estimated public loss (% of GDP, % of total touristic revenues) due to improper/destroyed areas with touristic potential	C	
	2	Number of in-danger species in National Reservation Parks (Danube Delta, Retezat, etc)	P	
Deficient waste management	1	Share of urban localities with improper waste management solutions by development region, by no. of inhabitants	Id, P,C	
	2	Share of establishments in danger of health problems due to improper waste management	Id, C	
	3	Absorptive capacity of European funds for adequate systems of waste management (Application Success rate, application numbers, value of funds granted) by development region, area	P, M	

Abbreviations:

ECHIM - European Community Health Indicators Monitoring
 MS – Health Ministry, through the Centre for Sanitary Statistics and Medical Documentation (CCSSDM)
 MAI – Ministry for Internal Affairs
 MAPN – Ministry for National Defense
 MMP – Ministry for Environment and Forests
 MDRT – Ministry for Regional Development and Tourism
 MMSSF – Ministry for Labour, Social Solidarity and Family
 MECTS – Ministry for Education, Research, Youth and Sport

MECMA – Ministry for Economy, Trade and Business Environment
 MJ – Ministry for Justice
 INS – National Institute for Statistics
 ANPDC - National Agency for Child Rights Protection
 ANPF - National Agency for Family Protection
 ANPH - National Agency for disabled protection
 ARIS – Romanian Agency for Foreign Investment

ANNEX 1. Risk management instruments classified by strategies and the level of intervention of risk management actors

Micro level (main actors: individuals, households, informal networks)	Meso level (main actors: communities, NGOs, insurance companies, financial market comp., legal & regulations, government)	Macro level (national governments, NGOs, donors)	Global level (international organizations, donor organizations, etc.)
Ex ante: prevent or reduce risk or reduce exposure to risk			
<ul style="list-style-type: none"> • Less risky production • Adoption of new technologies in production • Migration • Proper feeding and weaning practices • Engaging in hygiene and other disease preventing activities • Immunization 	<ul style="list-style-type: none"> • In-service training • Financial market literacy • Company-based and market-driven labor standards • Pre-service training • Immunization 	<ul style="list-style-type: none"> • Good macroeconomic policies • Stable political system • Rules and regulations • Guaranteed rights and security • Labor m. policies & standards • Child labor reduction • Disability policies • AIDS & disease prevention • Regulation against discrimin. • Investment in public goods & infrastructure • Compulsory education 	<ul style="list-style-type: none"> • Rights and security • Donor assistance
Ex ante: mitigate against possible welfare loss were the risk to occur			
<ul style="list-style-type: none"> • Multiple jobs • Investment in assets, social capital • Marriage/family/Extended family • Formal insurance (e.g., crop insurance) • Informal insurance (social capital) • Micro-insurance • Old-age annuities • Share tenancy • Tied labor • Formal and informal credit • Labor contracts 	<ul style="list-style-type: none"> • Investment in multiple financial assets • Microfinance • Physical and social infrastructure • Community arrangements • Informal insurance based on community claims • Risk pooling • Community credit unions/ savings clubs • “banks” • (farmers’) co-operatives 	<ul style="list-style-type: none"> • Pension systems • Asset transfers • Protection of property rights • Support for extending financial markets for the poor • Mandated/provided insurance for unemployment, old-age, disability, survivorship, sickness, etc. • Financial system • Inter-community credit • Association and “banks” for stocks 	<ul style="list-style-type: none"> • Formal insurance • Financial systems • Credit
Ex post: cope with the adverse outcome of risky events			
<ul style="list-style-type: none"> • Selling real assets • Selling of financial assets • Borrowing from neighbors • Borrowing from banks • Intra-community transfers • Sending children to work • Dis-saving of human capital • Seasonal/ temp. migration • Illegal activities • Rely on public assistance 	<ul style="list-style-type: none"> • Draw down on community assets (e.g., natural resources) • Depend on charity/aid from outside the community 	<ul style="list-style-type: none"> • Disaster relief • Targeted transfers/social assistance/safety nets • Subsidies • Public works • Social investment projects (social funds) • Depend of charity and aid 	<ul style="list-style-type: none"> • International financial assistance • Emergency plans • International food aid • Donor assistance

Source: Heitzman, Canagarajah, Siegel, 2002, adapted from Holzmann and Jørgensen, 2000

ANNEX 2. ANNEX: Active measures for employment within NAPE

- A. Increased employment probability for persons actively seeking work opportunities
 - a. Informing and profession counseling;
 - b. Work mediation
 - c. Professional training
 - d. Counseling for starting an Independent activity or a business
 - e. Income supplementing for employees
 - f. Incentives for labour force mobility
- B. Incentives for employers to hire unemployed or at risk of unemployment and to create new vacancies:
 - a. Subsidies for jobs
 - b. Advantageous Crediting for creation of new vacancies
 - c. Facilitations granting

Active measures for Employment targeted to most disadvantaged groups and most vulnerable to poverty unemployed:

- Unemployed over 45 years old
- Unemployed single providers for the family
- Youth
- Graduates
- Disabled

Number of persons employed through the accomplishment of the NAPE , youth /graduates, disabled, single providers for the monoparental family/unemployed 45 and over, /county