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# ECONOMIC RESILIENCE AND MARKET EFFICIENCY IN SMALL STATES

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**Abstract.** Economic resilience is the ability of an economy to withstand and rebound from the effects of adverse shocks. This is dependent upon the efficiency with which resources are allocated and can be reallocated following changes in exogenous conditions. Markets are a key factor in the allocation of resources, be they capital, labour, goods and services. Therefore, the extent to which markets operate efficiently is an important determinant of economic resilience. On the other hand, it is to be considered that instances of market failure are more common in small, vulnerable economies, which consequently have greater need for policy measures aimed at enhancing the efficiency of markets or at replacing them with appropriate mechanisms conducive towards building economic resilience. In this context, it is important to avoid instances of policy failure, which may nevertheless apply to a larger extent in small economies.

## 1. Introduction

There is an established body of literature exploring the special characteristics of small economies and their implications for economic behaviour and development which can be traced back to at least 1960 (Robinson, 1960; Kuznets, 1960). The principal defining characteristics, often viewed as handicaps, of small economies, include a high dependence on international trade, highly concentrated exports and imports due to limited diversification possibilities, a proneness towards current account deficits, a relatively large public sector within the economy and variability in output growth (Briguglio, 1995; Cordina, 2006). The recent wave of globalisation brought a fresh set of challenges for small states, as reviewed in a Commonwealth Secretariat and World Bank (2000) study, updated by Briguglio, Stern and Persaud (2006).

On the other hand, from an empirical perspective, it appears that the special characteristics of small economies do not impinge on their average levels of per-capita income but rather on the dispersion of their income levels from a cross-sectional perspective as well as over time (Cordina, 2006). These observations may be interpreted in terms of the fact that

small economies, especially if insular, tend to face higher levels of risks to their economic growth and development, engendered by their exposure to shocks. This phenomenon was studied by Briguglio (1995), who initiated the measurement of economic vulnerability with special reference to small and island economies.

The different degrees of success achieved by small states have more recently been analysed and associated with policy-induced, or nurtured, resilience factors which allow countries to absorb, withstand and rebound from the effects of negative shocks (Briguglio et al., 2006). Thus, economic growth and development of small states essentially hinges on the extent to which such states are vulnerable to adverse exogenous shocks and on the presence or otherwise of nurtured resilience to withstand such shocks.

Briguglio et al. (2006) identify four principal determinants of economic resilience namely macroeconomic stability, microeconomic market efficiency, good governance and social development. In the context of microeconomic market efficiency, it is argued that the existence of rapidly adjusting markets which efficiently allocate and reallocate resources in the wake of exogenous shocks is conducive to economic resilience. In this respect, Downes (2006) notes that market-oriented reforms in small economies are not necessarily successful in promoting resilience, due to the absence of sufficiently thick and deep market structures and a lack of institutional capacity.

This chapter presents a conceptual framework aimed at highlighting the importance of market efficiency for economic resilience building. It proceeds to show that the conditions for market efficiency are often insufficient in small states, where the types of market failure are different and more pervasive than those found in larger economies. Consequently, there is a case for policy intervention in small states with an aim of enhancing the resource allocation mechanism. Government intervention in this regard is however also beset by the possibility of failure. Furthermore, instances of policy failure are also likely to be more marked in small economies. This emphasises the need for proper governance structures in small states, possibly amplified and improved through supranational and regional arrangements.

## **2. Economic Resilience and Market Efficiency**

Briguglio et al. (2006) define economic resilience as being policy induced and as having two dimensions namely the ability to withstand shocks and the ability to recover quickly from the effects of adverse shocks.

Policy measures in this regard are aimed at neutralizing the effects of an economy's inherent vulnerability, that is, exposure to exogenous shocks that fall outside the control of the economy.

Cordina (2004) explains the need for resilience in terms of the asymmetric effects of shocks to which an economy may be exposed. Typically the effects of negative shocks would outweigh those of positive ones. This may be ascribed to diminishing marginal productivity of resources, entailing that a negative shock to an economy's resources would have stronger effects on output than an equivalent positive shock. Small economies may suffer from a double disadvantage in this respect. Not only are they inherently more exposed to shocks, but they may also be prone to a stronger rate of diminishing marginal productivity. This may take place as such economies are unable to reap economies of scale and of scope, due to size limitations. Furthermore, certain positive externalities on production, such as those emanating from good governance and research and development, would tend to have limited effect, or would come at a relatively high cost per unit of output, due to the fixed costs involved in the generation of such external effects.

Conceptually therefore, the issue of resilience building may be viewed as the implementation of measures that would retard, as much as possible, the onset of diminishing marginal productivity of resources. For this to take place, it is essential that resources are allocated as efficiently as possible, and are quickly reallocated to their best possible uses following exogenous shocks. If resources are in the first place efficiently allocated and the economy enjoys competitive advantages, the effects of adverse shocks can be mitigated. This would likewise take place if an economy can quickly reallocate its resources to their most productive and profitable uses following shocks to market conditions.

Two conditions are required for this to take place. Firstly, the price mechanism would have to operate properly such that prices would reflect the true cost of resources involved in production and of the benefits that society would reap from such production. For this to take place, there has to be, amongst other things, a sufficiently high number of buyers and sellers such that prices are not distorted through monopolistic and monopsonistic practices, and absence of externalities in production and consumption. Furthermore, information about prices is to be available freely and symmetrically to all economic agents. Secondly, there needs to be flexibility in the economy which would allow goods, services, labour and capital to respond to the price signals in the economy, thereby finding their welfare-optimising utilisation. These notions are based on standard neoclassical theory that suggests that the market mechanism yields static allocative efficiency gains and optimal welfare outcomes.

An example of how the functioning of markets may influence economic resilience may illustrate the point better. Consider the economy of Malta, where tourism generates an estimated 10 percent of GDP. As happened in other economies, activity in the tourism sector in Malta was adversely hit by the effects of the September 2001 terrorist attacks. This had ripple effects on the rest of the economy and tourism activity has been severely affected, and it was only in 2007 that it showed some signs of incipient growth as government started to subsidise low-cost airlines. The lack of resilience in the tourism sector may be at least in part ascribed to microeconomic market inefficiency. One such source of inefficiency in Malta originates out of the market for land, where prices are high, and increasing, in spite of an apparent excess supply of residences, as they are sustained by speculative pressures.

Another example can be found in the reaction to the increase in international oil prices. Like many other small economies, Malta is completely dependent on oil imports for its energy. An increase in the international prices of imports have a marked effect on economic and social activity. Domestic energy prices in Malta had been subsidised for a long time and when the subsidised prices could no longer be maintained, the consequent shock on the economy was magnified. The economy would have probably managed the shock much better had it been exposed to fair market conditions with fluctuating international prices. This could have led to a lower increase in domestic oil prices within an economy that was already geared to face movements in the price of energy.

On the other hand, the Maltese economy, like others such as Cyprus and Singapore, shows remarkable resilience in economic activities that are mainly market-driven. The liberalisation of external trade consequent upon EU membership entailed virtually no losses in jobs as inefficient sectors were forced to restructure or close down to make space for more efficient setups, also thanks to a well-trained and flexible labour force. Market forces are also allowing the slack in economic activity being generated by a secular decline in manufacturing to be taken up by services activities, mostly in the areas of IT and finance.

Loayza and Soto (2003) identify two key elements in the proper functioning of markets namely, the private participation and the existence of competition among private agents. This implies that government intervention in economic activity should be limited in depth and scope. Public policy could however occupy a central role in establishing the conditions for the proper operation of markets. Posner (1998) emphasises the need for an environment in which legal rights, especially property and contractual rights, are enforced and protected.

Klein and Hadjimichael (2003) highlight the need to ensure proper access to markets and private sector development through, for instance, competition policy, prudential regulation and enforcement of intellectual property rights. The public sector would also occupy a central role in the investment in public goods and building institutional capacity (World Bank, 2002).

The above conditions can therefore be construed as being central to the development of economic resilience based on properly functioning market mechanisms.

### 3. Market Failures

The fact that markets may fail to operate properly is well known in economics. This would entail that markets, if left to operate freely, would not generate desirable results, most notably failing in achieving allocative efficiency and welfare optimisation (Zerbe and McCurdy, 1999). The situations where markets would fail to operate properly include monopolistic production, the presence of externalities, sluggish market adjustment, missing markets, asymmetric information, uncertainty and socially undesirable distributive outcomes.

Monopolistic market situations often result out of the presence of economies of scale, engendered by high fixed costs in production. In monopolistic situations where producers have power over the market, prices do not accurately reflect resource costs and social benefits, thereby resulting in limited production at high prices, and an economically sub-optimal outcome. The obverse of this is a situation of monopsony, where the existence of buyers with strong market power would distort prices from properly exercising their function within an economy.

Externalities entail cost and welfare effects that cannot be incorporated within market prices. These effects are termed to be of a social nature, with consequences that go beyond the individual producer or consumer who would pay or receive a price in a market. In the case of consumption, externalities arise in the presence of non-rival and non-excludable goods, where benefits and costs cannot be restricted to the consumer who is actually paying for the commodity. In the case of production, externalities arise out of improperly defined property rights over the consequences of production from the utilisation of a resource. In the presence of externalities, market prices, which reflect costs and benefits as perceived by individual consumers and producers, would not indicate the costs and benefits as pertaining to society as a whole. Examples of this would include environmental pollution from productive activities, and on the

positive side, spillover effects to other productive sectors from the creation of knowledge or the adoption of new technologies in any one sector. In the presence of externalities, markets would result in a sub-optimal allocation of resources, with excessive production of goods entailing social costs, and insufficient output of goods providing social benefits.

Situations of sluggish market adjustment would entail lack of flexibility in the mobility of resources so that the price signal, although present, would not result in a timely optimal allocation of resources. This would take place in situations where the production of a commodity or resource would take a significant amount of time, such as in the development of human capital. It could also entail lack of mobility of resources due to geographical, cultural or social frictions. An example of this could be the cultural norms on land ownership in certain societies, where restrictions on transfers would result in a sluggish process for the resource to find its most productive allocation.

Situations of missing markets arise in the case where a demand for a product or service cannot be effectively met by supply due to technological, information or other constraints. This often happens in the markets for capital, where an economic agent cannot borrow, using future income as collateral, to a desired extent. Insurance is also often characterised by missing markets, as there are various risks that are not insurable.

Asymmetric information entails one party having superior information about a market transaction relative to another. Because of this, the market transaction will either not take place, as the less informed party would be unwilling to commit to a transaction where he is at a disadvantage, or occur at a distorted price, as the more informed party presses the advantage of superior information. A typical example would be the seller of a product having superior information about market prices than the buyers. In cases of asymmetric information, the outcome of resource allocation by the market will be sub-optimal.

The presence of uncertainty regarding the outcomes of a market transaction may likewise lead to a situation where the transaction either does not take place or where its price is distorted. An example of this can be the undertaking of a major capital investment project, where the returns to it are uncertain and would therefore imply a significant risk to the investor. In this case, it would be likely that the investment would not take place, resulting in an economically sub-optimal outcome.

Another likely sub-optimal outcome of the operation of markets concerns the distribution of wealth and income. As the market system essentially entails the sale and purchase of factor inputs and products at market

prices, access to consumption products is typically restricted to those in possession of factor inputs, be they human or physical capital. In a situation of a socially undesirable distribution of factor inputs, an unacceptable pattern of the distribution of output is likely to ensue. This would lead to a deteriorating social fabric, ultimately damaging the structures upon which the market economy is based.

#### *Market Failure in Small States*

Each of these instances of market failure is likely to be present to a larger extent in small economies compared to larger and more developed ones. In the case of monopolies, Chand (2004) observes that the thinness or small size of domestic markets and the need to achieve a minimum efficient scale of operations, often in the context of indivisibilities of investment expenditure, entails that a small number of operators would dominate the market in a small economy. This would create monopolistic situations in the output markets, and could also result in monopsonistic markets for labour.

The presence of externalities is likely to be greater in small economies compared to larger ones. Environmental externalities are likely to abound in the context of small land areas with multiple competing uses and a high density of population and economic activity, creating problems in a number of environmental domains such as water and waste management. This could especially be so within island jurisdictions, where the management of the typically more vulnerable coastal zones could be even more problematic. Likewise, the infringement of property rights through external effects is likely to be more pronounced within small jurisdictions. There is also bound to be an asymmetric effect of externalities within small economies in the sense that while negative externalities are bound to be more pronounced, the effects of positive ones, which would cumulate commensurately with the size of the population and the economy, are likely to be more limited. In this context, it is also worthwhile mentioning that small economies are disproportionately suffering from external effects at the international level, chiefly those arising out of climate change but also those arising out of unintended side effects of international trade agreements and arrangements between large countries, particularly where these concern environmental resources (Fraser and Ronneberg, 2006).

Sluggish adjustment of markets is also likely to characterise small economies. This can emanate from the fact that in order to compromise between economies of scale and of scope, activity in small economies tends to specialise in a small number of unrelated activities. This would generate an amount of economies of scale in each sector, while allowing

a measure of diversification against risks which may hit each specific sector. On the other hand, this would also entail that mobility of resources from one sector to another would be limited, due to the marked differences in the nature of operations between sectors. It is neither easy nor quick to transform restaurant waiters into operators in hi-tech electronics factories in the case of an adverse shock to the tourism industry. This is typical of economies which are structurally ingrained to produce a limited range of output, as indeed experienced by those which specialised in the production of specific agricultural products and which were hit by adverse international terms of trade effects. Sluggish market adjustment may also reflect the thinness and shallowness of markets in small economies, as limitations in the number of players and activities hinder the speed with which resources may be reallocated.

The issue of missing markets, particularly in the case of capital and insurance, is another characterising feature of small states. Due to their inherent weaknesses and vulnerabilities, small states could disproportionately benefit from access to the global capital markets for financing and for insurance (Stiglitz, 1995). Yet, such markets are often missing, on account of the difficulties in discounting future income streams and in insuring risks of an unusual nature that typically afflict small vulnerable economies. Missing markets in small states also exist at a domestic level. Due to the limited economic size, small states often have to resort to outside sources for commodities and resources which may also be of a strategic nature. The reliance of many small states on foreign direct investment, in the absence of sufficient domestic capital resources, which is at times associated with sub-optimal outcomes for the host country (Edison et al., 2002), is a case in point.

Information asymmetries may also characterise the operations of markets in small economies. This may arise out of the presence of relatively large market players, which could exercise monopoly rents to obtain superior information relative to the more numerous customers with lower bargaining power. This situation could also be present in the international trade arena, where operators from a small economy could face information disadvantages relative to multinational players. Moreover, there could be information asymmetries in official international trade bargaining processes, where small countries could be at a disadvantage in terms of expertise and hence, bargaining power (Palayathan, 2004).

Uncertainty is an unavoidable consequence of the exposure to shocks which characterises small, vulnerable economies and often results in market failure. Exposure to shocks creates risk in the undertaking of investment which cannot be easily diversified away within a small



country context. This may result in slower development processes in small countries. Another consequence of uncertainty is excessive volatility in prices in reaction to actual or anticipated market shocks. This is often reflected in high exchange rate volatility for small states which do not opt for a managed exchange rate regime (Worrel et al., 2006). In turn, exchange rate volatility would introduce risks to the import and export business on which small states are highly dependent, thereby distorting prices of internationally traded commodities in the upward direction, resulting in a loss of welfare.

A socially undesirable distribution of income often results from market failure in small economies. Economic backwardness resulting in poverty may occur from a number of instances of market failure discussed above, and is indeed documented for a number of small economies (Springer, 2006). In particular, an excessive concentration of economic activities may increase the social vulnerability of particular segments of society which, in the event of adverse shocks, would find it difficult to re-engage in economic activity.

#### **4. Policy Failure in Small Economies**

The above discussion highlights the need for government intervention in order to rectify market failure, especially in small, vulnerable economies where the incidence of market failure is, as explained above, relatively higher. Government intervention however may also result in failure. Krueger (1990) categorises instances of policy failure into two broad groups namely failures of commission, where government intervention actually worsens the economic situation, and failures of omission where government actually refrains from intervening when it should optimally do so.

It can be argued that the chances of policy failure tend to be higher in small states than in larger ones. Datta-Chaudhuri (1990) argues that government intervention may result in unpredictable changes in economic conditions and in costly mistakes. This risk is especially high in small economies where the government sector is relatively large and any single intervention is bound to have widespread effects.

Furthermore, the objectives of government policy may be obfuscated between economic, social and political rationales. This can be especially the case in small economies due to the incidence of clientelism in the political system, created by the proximity of social and political relationships and to the possible concentration of political power within a small group of elites.

Policy intervention can also fail from the implementation perspective. This is often the case in small states which lack the human resources and other aspects of administrative capacity necessary to properly implement policy measures. It is also to be considered that government intervention often results in a costly bureaucracy, with such costs likely to be commensurately higher in small states due to problems of indivisibility.

Government intervention may stifle private initiative. This can happen to a greater extent in small states, where there could be a major tendency for the economy to be dependent on government for the provision of income and employment.

Better economic governance is the principal solution to the failure of policy failure to adequately address market failure (Carment, 2003; Holden, 2004). This is likely to be especially so in small states, where the incidence of policy failure is bound to be relatively more pronounced, at the same time that the need for properly functioning markets to face economic shocks is exacerbated. In small states, good governance is not only crucial in the process of development, as is the case for all economies, but also contributes to building resilience against exogenous shocks. Indeed, economic governance issues are deemed to be an important explanatory factor for the wide variations in the degree of economic success achieved by small states (Briguglio et al., 2006; Warrington, 1994).

## 5. Conclusion

It is now widely accepted in the literature that small states are economically vulnerable and are highly exposed to exogenous shocks outside their control. This has to be met by resilience building, intended to enable small states to withstand and counteract the effects of negative shocks. In turn, resilience depends on the efficiency with which resources are allocated and can be reallocated following the incidence of shocks.

Markets are viewed to constitute the optimal vehicle for resource allocation. This chapter has shown, however, that resource allocation via the market mechanism is bound to meet with instances of failure, and this is especially so in small states. Market failures include situations of monopoly and monopsony, external effects and the consequences of uncertainty and missing markets. Policy intervention is therefore especially called for in small, vulnerable states so as to rectify market failure through policies which define property rights, ensure proper market access and private sector development, and provide for the investment in public goods. These issues are considered to be critical to an optimal allocation of resources and to the development of resilience.

It is however also recognised in the literature that policy intervention in small states may also be fraught with failure. Such instances, which may arise from obfuscated objectives, mistakes in policy formulation, problems in policy implementation and high costs of policy intervention would also tend to be magnified in small vulnerable economies. This is due to the relatively large size of the government sector, social proximity, insufficient human and administrative capacity and indivisibilities in the costs of the public sector. It is therefore imperative for small vulnerable states to build resilience through appropriate policy interventions aimed at eliminating market failure through enhanced efficiency and proper governance.

Different small states have achieved varying degrees of success in this respect. There is no one general model for appropriate policy intervention and governance, and solutions have to be devised which are appropriate to specific country contexts aimed at eliminating both market as well as policy failure. Appropriate policies for small states in this regard should give due importance to small economy realities including thin markets, indivisibilities of overhead expenditure, limited ability to achieve economies of scale especially in manufacturing and, in the case of islands, high transport costs. This suggests that small states that need to build their economic resilience should not take “off-the-shelf” remedies from larger countries but should emulate successful models pertaining to other small countries with similar characteristics and problems.

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