Boom and Bust: The Influence of Macroscale Economics on the World’s Coasts

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INTRODUCTION

The recent and ongoing global economic crisis and its immediately preceding boom have had profound impacts on coastlines worldwide. They provide some insights regarding the influence of macroscale economics on coastal sustainability, and here we explore the implications for coasts and the communities that use them. We conclude that the economic boom has had disastrous consequences for coastal sustainability worldwide. One of the major lessons from this period of rampant development is that current coastal management is not up to the task.

BOOM TIMES—LET CONSTRUCTION ROLL

The past decade has been a period of abundant and easy credit that fueled a massive growth in construction. Property became the central focus of the economic boom. No other investment vehicle offered returns on the scale available in property. Risk was perceived as minimal compared, for example, to playing the stock market. The lending policies of banks ensured the easy availability of cheap money. With steadily rising property values perceived as removing virtually all risk to lenders, banks abandoned their previous cautious rule of thumb of giving mortgages to about three times annual income to six to seven times income, and in many cases they offered 100% mortgages or more. The ready availability of low-interest loans both for developers and buyers, and the desire of investors to get a slice of the profitable property market, led to a surge in construction of coastal housing, especially holiday homes and apartments. Demand rocketed, causing property prices to rise to previously unimaginable levels, which in turn encouraged coastal landowners to sell.

Unlike earlier phases of intensive development in Europe when tourism infrastructure comprising mainly hotels was constructed, the recent period chiefly involved the private property market. Indeed, many hotels were demolished to make way for apartments. Throughout Europe, coastal property development boomed with huge developments of single and multiunit dwellings being constructed for sale as holiday homes to those availing themselves of easy credit. The coast was effectively consumed by housing development. The effects were particularly dramatic in southern Europe (Spain, France, Italy, Greece, and the Canary Islands) with massive areas of coastal land being covered with apartments, condominiums, and houses, overwhelmingly for use as holiday homes (Figures 1 and 2). The purchasers, however, were drawn from across the continent and beyond, their travel being facilitated by the growth in cheap flights. The demand outstripped supply and prices rocketed, commonly increasing by 10%–20% per year. In Great Britain, several coastal towns saw the sale price of property rise by 90%–100% over a 2-year period. Those with a mere 25% increase over the same 2-year period were reported in the press as “relatively stable.”

The demand for coastal property was such that market prices reached levels that would previously have been unthinkable. In Wales, the price of 12 × 10 ft beach huts, which cannot be connected to water or electricity supply and cannot be used for accommodation, rose in price from £20,000 ($US29,000) in 2002 to £28,000 ($US45,000) in 2003 and £56,000 ($US100,000) in 2004. A 12-ft wide strip of sand dune without a hut sold for £50,000 ($US89,000). In Bournemouth, England, similar beach huts with a 25-year lease were being sold for £350,000 ($US670,000) in 2005. A seafront public toilet block in western Ireland went on sale for €250,000 ($US320,000). In Portballintrae, Northern Ireland, a 17 × 33 ft shed (Figure 3) was on sale at £200,000 ($US356,000) in May 2006.

Against interest rates on loans of 5% or less, and relaxed approaches by financial institutions to lending, the obvious result of the rush for property and the rapid increases in value was going to be rampant speculation by investors, many of whom had not previously been active in the property market. The situation rapidly arose that the footprints of houses were worth more than the buildings themselves; consequently all around the British Isles, houses were demolished and
replaced with multiple units a few years after initial construction.

Increased mobility fueled property development in new EU member states keen to gain a slice of the action, and intensive development began in eastern Europe along the Black Sea coasts of Romania and Bulgaria. The countries of the former Yugoslavia, newly emerged from war, also saw tourism-based development as an economic saviour and here too coastal development mushroomed. The same was true in Cyprus, both north and south. Demand from the credit-fueled European market was so large that coastal properties began to be developed rapidly in adjacent Turkey and North Africa.

The increasing value of properties increased the value of coastal land, which was already a finite resource in any case. In Spain, go to the margin of any coastal national park and the development starts within inches of the fence—cheek by cheek, holiday apartments have been squeezed into the available space. In many countries even public land was being sold for development, such was the perceived demand for housing and the profit to be made by local authorities from the sale of public land. The answer to the space problem was either to build more units per square metre, look further afield, or create more coastal land.

The European market had already extended to North Africa and Turkey, but so easy was credit and so big the profits to be made that distance became less of an object. European Sunday newspapers became festooned with advertisements for coastal property for sale in all the places already mentioned, but also further locations like the Cape Verde Islands, Brazil, Costa Rica, Tanzania, Kenya, South Africa, Australia, and New Zealand—in fact anywhere perceived to have a stable government with low risk to investment was on the radar of the property developers and governments keen to cash in on the boom facilitated by development. Such was the willingness to cash in that even counties with less stable governments (e.g., Thailand, which had a military coup) were regarded as favourable for coastal development.

In the Middle East, coastal property development for sale to foreign owners saw the construction of massive numbers of apartments and villas initially on dry land (Figure 4), but as that became exhausted, on land specially reclaimed for the purpose (Figure 5). The enormous engineering works of Dubai, closely followed by other Gulf states, are intended to create as much space for building on the coast as possible. On the Gold Coast, Australia, large-scale apartment block development on a sand barrier with finite space forced a skyward rush for space (Figure 6). In the back-barrier area, low-lying land was converted to canal estates with multimillion dollar homes for sale to a global market.

Figure 3. A shed in Portballintrae, Northern Ireland, on sale at £200,000 ($US$356,000) in May 2006. The price included no land other than the footprint of the building itself. For a color version of this figure, see page 661.
The home markets in many countries were also boosted by easy credit, and even on colder temperate coasts increased demand for coastal property created a boom in construction. In Ireland, land in small rural villages was bought up and new housing developments were constructed. In rural coastal villages, any property on the market was bought up by outsiders as second homes. These second homes had typical occupancy rates of 1 week in 52. Owners didn’t need to stay in them—they were simply investments that existed on the landscape as huge, empty housing estates. All that was needed to complete the ghost town effect was tumbleweed blowing down the empty street. The scenic blighting of the rural Irish coast by such “unrestrained development” owned by nonresidents was commented on by the press. In the UK, planning restrictions and environmental designations constrain the availability of coastal development land to some extent, but this constraint on development was overcome by the purchase of single dwellings at hugely inflated prices, followed by their demolition and construction of blocks of apartments on the same footprint. The effect wasn’t limited to existing dwellings—hotels, pubs, and shops were demolished and replaced by apartments because far more quick money could be made through property development and speculation than in these services.

**SOCIOECONOMIC IMPACTS**

While it lasted the boom was good for construction and all its ancillary services. Rural areas saw employment boosted and the local economy stimulated by the trickle-down effect into the community. In Spain, more than 20% of all jobs created between 2004 and 2007 were in construction. For some coastal communities, however, the construction boom had disastrous social consequences. Elderly people, who had formerly been surrounded by families and a normal neighbourhood support system, found their homes lost in a sea of unoccupied apartment blocks. Property prices were so high that local people, for example, young married couples, found it impossible to go on living in their home town. In rural communities, emigration speeded up, and communities were engulfed by relatively well-heeled foreigners. In the rural Gaelic-speaking areas of western Ireland, the influx of English-speaking holiday home owners on the weekend was seen to dilute the culture. The same was true of the Mediterranean coasts with a massive influx of second-home owners speaking foreign languages and with different cultural outlooks. In developing countries, the demands and attitudes of western coastal holiday home owners often conflicted with those of the host rural communities.
Efforts to stem some of these negative social effects in northern Europe included requirements on property developers to provide a percentage of social housing or low cost housing. Often these were thwarted by developers simply leaving the requisite areas undeveloped and buying their way out of such commitments—more profit could be made on the next private development than by constructing social housing. Efforts to stem the influx by raising property taxes were also ineffectual because of the size of profits to be made.

Services often didn’t keep up with residential development because the land needed to accommodate them was more valuable for housing. The coastal town of Portballintrae in Northern Ireland now has no shops and until recently no hotel because they had been converted into apartments. More than 60% of the housing in the village comprises second homes. On the few days that these units are heavily occupied, services such as water supply and sewerage are under strain. With shops and hotels sold for development in rural coastal areas, stable, long-term jobs were lost, and services for local communities diminished. The coast was becoming privatised and access increasingly difficult. As some local residents sold up in response to vast sums of money being waved in front of them, those who were left saw the social fabric decay around them.

Aspects of the tourism industry suffered from the boom. Privately owned second homes bring little long-term benefit to coastal economies. When they are occupied by the owners, provisions are often brought from home or bought from multinational supermarkets outside the coastal zone. Hotels and guesthouses suffer as speculators’ property is let to holidaymakers, and the revenue that might have entered the local community though hotel occupancy and the associated jobs dries up. Some economies don’t even gain by taxes. In Ireland, nonresidents don’t pay property taxes—because it is extracted via income tax. In the UK, unoccupied homes do not attract property tax. In Dubai, there is no property tax for nonresidents.

The lure of fast cash also encourages corruption and illegal development. Many cases of corruption have been reported in the press because permission is granted for construction illegally. In November 2005, Greenpeace activists seized a hotel under construction in southeastern Spain, claiming that it was illegal under the national Ley de Costas but was being built with the connivance of local authorities. The activists contended that this exemplified the free-for-all on the coast where environmental protection was ignored in favour of speculative interests. The opposing, developer’s view that halting work would have negative impacts on the socioeconmic development in the region is probably typical. The Spanish government has recently announced plans to regain control over the coast after provincial and local governments had breached national laws to encourage development of hundreds of thousands of housing units.

ENVIRONMENTAL IMPACTS

Coastal development transforms the coast. This is even appreciated by some second-home owners (in particular by those who actually use their second home), and it is well known that many resist further development because it spoils the view or leads to crowding. The development process itself can be destructive. In Phuket, Thailand, two-thirds of the reefs have been reportedly damaged by debris and sludge created by construction work. In Dubai, dredging of sand for construction of artificial islands and peninsulas destroyed seabed habitats and increased turbidity in the nearshore.

An inevitable consequence of coastal development on soft shorelines in particular is a demand for shoreline armouring or beach nourishment. The explosion of building development in coastal areas generated by a buoyant economy also promoted the construction of coastal defences. Cash-rich developers and property speculators want to protect their investments from erosion and flooding, so they put pressure on planning authorities to permit the construction of hard defences such as seawalls and rock armour revetments.

Often shoreline management and housing development are managed by different public bodies, and building along natural shorelines proceeds with little regard to the long-term implications of shoreline change. It is inevitable that investors who see their capital threatened by shoreline recession will demand coastal protection. Often local authorities have no previous experience of such demands and of the effects of coastal defence works on the coast. Nonetheless, the perceived benefits of beachfront property led them to be supportive of coastal defence structures. The increased value of the property skews the cost-benefit analysis in favour of some form of defence. The money to be made and the short-term economic benefits of construction in job creation and ancillary professions makes local governments look favourably on it. Even where local groups and NGOs protest against environmental degradation, there is a grotesque mismatch in financial (and usually political) muscle between them and the powerful development lobby.

The marked difference in attitude between second-home owners and local residents is well illustrated by a 2007 BBC report from Zanzibar that described coastal erosion that threatened the beachfront holiday homes of wealthy foreigners. Several generations of sea defences had been constructed in efforts to defend the houses. In contrast, the traditional solution to such problems by locals was simply “If the sea comes, move further up the beach. No problem.”

BUST—THE BUBBLE BURSTS

In late 2007, the economic downturn that resulted from the realisation that the boom was based on unsustainable levels of credit had immediate effects on the construction industry. Almost immediately, the entire property market ground to a standstill as credit dried up and speculators were left with outstanding loans on property that was now falling in value. In the UK, property prices have been falling consistently since October 2007 by relatively small annual amounts (about 16%) compared with the rises seen during the boom times, but the most dramatic impact is seen in the seldom-reported sales volumes that are down by 90% in some localities (45% overall). In the giant construction site that is modern Dubai, British newspapers reported in November 2008, mansions on the Palm Jumeirah that had cost 15 million
UAE Dirhams ($US 4.1 million) in September could be had for a mere 10 million Dirhams ($US 2.7 million) in November. Ongoing development in Dubai is being deliberately slowed down as prices drop.

A postboom view of the world’s coast is like surveying a battlefield after the fighting has stopped. Across Europe many developments stand empty or are half-finished and other sites remain undeveloped. Where the original property had been demolished, the sites remain vacant. In some towns, rows of boarded-up former houses stand awaiting demolition. In Spain, where huge stretches of the Mediterranean coast were covered in apartments aimed at a largely North European market, many blocks are either unsold or unoccupied. These bleak monuments to the boom indicate that as far as the coast is concerned, speculation is now at an end. With the lack of available credit, it is now clear that many more buildings have been constructed than can be sold—there is now an oversupply. These empty structures indicate a wider point—that it is immoral to degrade the natural environment and decimate coastal communities by tying up scarce coastal space in investment property for a nonresident population that doesn’t even use it.

In January 2009, planners in Britain reported that the number of planning applications being submitted to local authorities fell by 60% in the past year. Concerns over job losses in construction and all the ancillary services (planning, conveying, quarrying, real estate) exposed the short-term nature of the economic benefits of a construction boom.

During times of economic depression and falling tax revenues, central government agencies, and the regional administrations that they fund, face a shortfall of funding leading to a series of stringent cutbacks. One advantage of this is that they are much less likely to fund hard-engineered coastal defence structures. However, an economic downturn generates some potential problems for coastal management. During bad times authorities will do only what they must do, i.e., they will spend money on their statutory functions and nothing else. In many countries in Europe, and around the world because coastal zone management per se is not a statutory responsibility, authorities may not fund any new coastal zone management (CZM) initiatives and even suspend ongoing ones.

Staff cutbacks in local authorities are also a factor. A general atmosphere of crisis and insecurity among the staff of a management authority is not conducive to new coastal management initiatives. Furthermore, redundancies mean that the permanent staff (and surviving contract staff) have to take on more work. Naturally, they have little enthusiasm for activities that are not absolutely essential, and coastal management is often regarded as being in this category.

A further problem may be that during a downturn authorities feel obliged to support any green shoots of economic development that might arise. Thus, an application to build an industrial or tourist complex in an environmentally sensitive area might get a more sympathetic hearing than in better times. This echoes a common perception that in bad times communities cannot afford the luxury of environmental perfectionism.

MACROECONOMICS AND COASTAL SUSTAINABILITY

A sustainable approach to coastal management must be defined to take a temporal perspective of several years or even decades: Anything that is shorter in its outlook would ignore the implications for future generations. The coast is at the interface of development pressure and natural processes. The two find it difficult to coexist under any circumstances because development often demands stability while natural processes involve change. Increased development heightens the tension on one side by demanding stabilisation. On the other side, accelerated sea-level rise enhances the chances of large-scale coastal geomorphological change. A construction boom at a time of accelerating sea level rise is like a head-on collision. In the short term, society often seeks to resolve this through coastal engineering. In the longer term, of course, this is simply storing up problems for another day and another generation because people continue to strive to protect ill-sited development in the face of natural coastal processes.

In the UK, there is growing realisation, manifest in the government’s “Making Space for Water” policy, that the extent of existing coastal and flood defences is so great that it will be increasingly difficult to continue with maintenance. The present situation is therefore clearly unsustainable. Some tentative experiments in managed retreat have been attempted, and large-scale retreat in low-lying areas of East Anglia has been mooted, but a major shift in shoreline management practice has yet to be realised.

In Ireland, the recent economic boom associated with the so-called Celtic Tiger economy, saw a spate of coastal development on what was formerly a predominantly natural coast. According to the European Environment Agency, Ireland had the highest rate of increase in area of urbanised coastal land of any European nation between 1990 and 2000. The inevitable outcome has been an increase in demand for coastal protection. During the present economic downturn when finances are stretched, those seeking public funds for coastal protection are unlikely to receive a hearing.

The negative effects of coastal protection on the environment are well known, although their patently unsustainable nature at a time of rising sea level is less commonly appreciated. A recent study of the Humber estuary in England (Turner et al., 2007) concluded that coastal defence and conservation goals could be met most economically by managed retreat if the costs and benefits were considered at periods greater than 25 years. At shorter timescales, coastal defence was economically favourable.

The effect of property development is that the coast is being privatised and rather than providing a benefit to society as a whole, its limited space is being used to make money for a few individuals. Coastal communities suffer directly but so too does wider society because the coast is covered in a ribbon of unnecessary development, the benefits of which to the economy are fleeting, but whose long-term impacts on the coast are dramatically harmful. It is surely immoral for a communal resource that is enjoyed by the population as a
whole to be damaged or destroyed by wanton profit-driven development.

The obvious conclusion is that economic boom times are bad for the coast. They create unsustainable pressures on coastal resources and negatively affect the communities that live there. The short-term economic gains through construction are far outweighed by the costs to society at any meaningful management or natural timescale. It is undoubtedly true that construction brings immediate but short-term economic benefits, particularly to rural coastal economies, but also to national economies, as exemplified by Spain. There is, however, long-term damage to the environment, increased risk from flooding and erosion, enhanced economic argument for hard defence as a shoreline management policy, damage to the social fabric, and all without any long-term economic benefit.

There are two routes to a decision not to defend a coastline. One is through enlightenment when the long term damage created by holding a coastline stable is weighed up against the short-term benefits of defending property. A second route is through pragmatism. That route is followed when there simply isn’t enough money to pursue any other option than retreat. During a recession, the frequency of pragmatic decisions not to defend is likely to increase. The lack of money for coastal defence in Ireland in the past forced other options to be pursued when property was threatened by shoreline recession. Better still, the lack of money prevented unnecessary development at the coast and largely preserved it in its scenic natural condition.

During the economic boom times of the past decade and a half, the costs of coastal defence seemed tiny compared with the profits to be made. The long-term consequences of such an approach mean a commitment to defence forever (Cooper and McKenna, 2008). The blatant contradiction during the boom of moves toward managed retreat in some places (in part motivated by economics and in part by concern over climate change) and the construction of new housing developments on high risk coastal land elsewhere (motivated by speculation) was striking. On an average weekend any British Sunday newspaper contained articles warning of the dangers of climate change, but the property section of the same newspapers were bulging with advertisements of prime coastal land and property for sale. The disconnect between development and shoreline management could not have been more evident. Not only did property developers and government authorities show a lack of concern regarding the risks of development on coastal land, but in some places fresh risks were being created by construction of artificial islands in the ocean and excavation of canal estates in back-barrier lagoons. The length of coastline in Dubai, for example, is being increased to 625 miles compared with its original 43 miles by construction of artificial islands and promontories.

Contrary to intuition, which says that during hard times, money for environmental projects is in short supply and that the coast might suffer (indeed some CZM initiatives might go under), a general lack of money is good for coastal sustainability. A lack of money might prompt reappraisal of coastal defence practice, as in the UK. It will almost certainly slow development of the coast. It might prompt changes in policy from the near ubiquitous strategy of hard or soft defence to abandoning sites where the costs of continued human occupation are too great. In letting the coast operate naturally, a more sustainable future could be achieved. The coast doesn’t need money to be spent on it—it can manage quite well by itself if left alone to do so. Cooper and McKenna (2008) have pointed out that the general absence of hard coastal defences in Ireland compared with the neighbouring island Britain largely reflects the fact that the relatively poor Irish economy could not afford these structures.

Public works on infrastructure are a common approach to economic downturn. As long ago as the Famine of the 1840s, roads and estate walls were constructed across Ireland to create work. In the United States, the interstate highway system was funded in part to stimulate the postwar economy. In the UK at present, government has promised to bring forward major public construction projects for the same purpose. Unfortunately some of these are on low lying coastal land vulnerable to flooding and risk repeating some of the problems that were manifest during the boom. It would be a tragedy if coastal defence works were ever considered as a job creation scheme. In an earlier misconceived job creation scheme during the 1930s depression, the Civilian Conservation Corps built a series of artificial dunes from the Virginia line to Ocracoke on the outer Banks of North Carolina to ‘stop’ erosion and protect the road. By tying up sand from the beaches in these artificial dunes, the actions are now known to have steepened the beach and probably accelerated coastal erosion rates.

The negative impacts of a speculation-fueled rush for coastal development are vast. The impacts of the boom—postboom situation of the past decade should be a wake-up call for society as a whole. The inability of managers to cope with the surge in coastal development is partly responsible. This might have been due to the unprecedented volume of development activity and inexperience in dealing with coastal issues in a holistic way. In either case, it underscores the need for effective management structures to regulate coastal development—not just in the developed world—but across the world’s coasts.

**LITERATURE CITED**
