already) was further shortened by scheduling and technical difficulties.

The result was a condensed explanation of the role of a visual merchandiser, generously illustrated by examples of Ivanova's work with department store John Lewis. A greater attempt to apply retail merchandising to the local scenario would not have gone amiss. Nevertheless, the insight into visual merchandising in larger retail spaces still proved interesting to those who wish to see greater attention to the aesthetic and sensory aspects of local retailing."

A THESIS FOR THE BUILT ENVIRONMENT

Date: **01-08 October**
Location: **Old University Building, Valletta**
Organised by: **Graduates from the Faculty for the Built Enviro nment**
Commented by: **one of the students**

"The students who have just completed the B.E.&A. course from Faculty for the Built Environment exhibited their thesis projects at MDW. The exhibition consisted of a series of proposals that attempt to squeeze the potential out of certain areas around Malta which are in dire need for some life and vibrancy.

The architecture students presented several projects that could inspire an architectural regeneration in, and around Valletta and Floriana – areas that have become part of daily conversation for having attracted a spur of altering urban interventions.

The urban design students presented a project that analyses the state of a local settlement (Xgħajra) and then proposes a few surgical interventions that are applied to a situation that is aching for improvement. This chosen locality has, in recent years, been blighted by rapid piecemeal developments and has found it very difficult for a local identity to assert itself.

The engineering students explored structural challenges presented though an infrastructural, cultural or industrial project. The process carried out involved architectural and structural design, unified using a sustainable approach."

UNDER A TILTED ROOF

Dates: **07-31 October**
Venue: **Camilleri Paris Mode, Rabat**
Commented by: **James Muscat**

The exhibition displayed the work of three notable photographers, Kurt Arrigo,

From "Under a Tilted Roof". Photo by Kurt Arrigo

Alexandra Pace and Anna Runefelt.

Kurt Arrigo's photographs of Bormla's Dock 1 showed the landmark prior to the commencement of construction works on it. One photograph portraying the waterfront building's reflection in the sea was particularly striking. Other photographs of the harbour against dramatic skies and seascapes were equally breathtaking.

In strong contrast, Alexandra Pace's black and white photographs portrayed intimate encounters with beautifully lit objects in compositions which often called to question the nature of the object itself. Pace's portrayal of glass was particularly appealing.

While Anna Runefelt's photographs of human figures were shot at some spectacular locations in Malta, she appears to have avoided allowing the places to dominate the subject of the pictures, instead allowing the images to emerge from a combination of props, outfits, place and of course the human subjects. Particularly delightful were a rope-based outfit and a miniature sailing boat which made frequent appearances throughout the photographic collection.

That there was no apparent relationship between the three photographers' contributions did not detract from the appeal of their collective display, perhaps because the exhibition's setting amidst a wealth of furnishings allowed for a certain degree of variety. Overall, the exhibition was certainly worth the visit.

– MDW was financially supported by the Malta Arts Fund, the Good Causes Fund and Bank of Valletta. It was co-ordinated by Chris Briffa, Prof Alex Torpiano, Anton Grech, Stephen Vella, Matthew James Mercieca, Justin Schembri, Liliana Vella, Matthew Casha and Lisa Gwen Baldacchino.
– Partners included the University of Malta, MCAST, HalMann Vella, JP Advertising, S.A.W Ltd., FLOW, Pedrali, Ellul Wines & Spirits, 240 Ltd., Garden it, Absolut Vodka, Valletta Local Council, Nexos, one-percent, camilleriparismode, cre8, Facedisplays and iCentre.
– Further information is available at www.maltadesignweek.com

Housing Affordability

In a paper titled "A long-term analysis of housing affordability in Malta" published earlier this year, Perit **Denis Camilleri** analysed the trends and principal causes of developments in house prices in Malta over the 26 year period between 1982 and 2008, with a specific focus on the issue of affordability. The paper also derives projections for likely future developments in this context and proposes some policy options in this regard. The report discusses mainly the affordably housing category, though it also touched upon the up-market residential sector. The rental market, sustainable housing measures, housing densities and high-rise developments are also analysed in the report. Here, **"the Architect"** takes a look at some of the key findings of this report, which is largely based on data collected from National Statistics, together with databases held by the author's practice DHI Periti.

THE CHARACTERISTICS OF THE HOUSING MARKET 1982-2008

The home-ownership rate registered in 1948 registered at a mere 23.1%. This has risen dramatically from just over 50% in 1985 up to 75% in 2005 (see Table 1). This high home ownership is comparable to Spain's 82%, Greece and Portugal's 72% and the UK's 70%. Other European countries with lower home ownership rates include Finland at 62%, the Netherlands, Denmark and France at 54%, and Sweden and Germany at 45%.

The report indicates that the home¬ ownership rate is expected to level out at 90% in the year 2065. This considers that 10% of all households would always require subsidence in order to be able to afford their own residence. In this regard, Camilleri comments that although various subsidy schemes were introduced over the report period to try to restrict the increase in property prices, these often fuelled demand and/or curbed supply and resulted in stronger price increases in the property market within a period of some months.

Malta's real estate growth may be gauged from the value of an average property contract in 1982 which stood at Lm3,766*, to that of contracts in 2006 noted at Lm35,232, declining from the 2005 value at Lm41,632. This implies an annual average growth of 9.25% per annum, as compared to the annual growth of the GDP current market price/capita, which over the same period stands at 5.125% per annum.

AFFORDABLE HOUSING

Affordable housing is normally related to the ability to pay. Financial institutions typically only lend money such that borrowers do not need to contribute more than 25% of the net household income towards mortgage monthly repayments.

Year	1948	1957	1967	1985	1995	2005
%	23.1	26.1	32.0	53.9	68.0	75.2

Table 1 – Home ownership rate. Source: National Statistics Office (2007)

Year	Mortgage Monthly Payment		Medium Family Income**	Qualifying Monthly Income		Ratio of Qualifying Family Income		Housing affordability Index (HAI)		House Price: Earnings Ratio
	3bed	2bed		3bed	2bed	3bed	2bed	3bed	2bed	
1982	€140	€56	€229	€559	€391	1.3	0.91	77	110	4.28
1987	€161	€114	€564	€643	€457	1.14	0.81	88	123	4.23
1992	€252	€168	€745	€1006	€531	1.35	0.90	74	111	5.27
1997	€384	€247	€995	€1537	€988	1.55	0.99	65	101	5.80
2002	€394	€263	€1215	€1575	€1057	1.29	0.86	77	116	5.60
2006	€606	€429	€1665	€2119	€1500	1.27	0.90	79	111	7.22
2007	€673	€478	€1738	€1046	€1670	1.35	1.01	74	104	6.97
2008	€615	€410	€1798	€924	€1435	1.2	0.80	84	125	6.58
2009	€478	€319	€1871	€718	€1118	0.89	0.60	112	168	6.11
2010	€472	€315	€1914	€1652	€1102	0.86	0.58	116	174	5.99

Table 2 – Housing Affordability Index (HAI) for the Maltese Islands
An HAI of 100 according to the US National Association of Realtors' signifies that a family earning the median household income just qualifies for a median residence, whilst a HAI of less than 100 signifies that the median family has to do away with other necessities.
**the median family income is factored at 1 for 1982, and by 1.35 for 2002 increasing to 1.575 for 2009 to account for the effect of the 2nd wage earner.
Source: updated table Camilleri (2000)

The report states that between 1982 and 2008, "affordable house prices have increased by 625%, doubling in price over the initial ten-year period, doubling again in price over the subsequent ten-year period and then nearly doubling again in price over the past immediate five-year period."

Comparing data for various localities, the paper indicates that in 2007, the affordable three-bedroom and two-bedroom apartment averaged out at Lm45,000 and Lm40,000 respectively in Fgura, Paola and Zabbar. In M'Scala, these averaged out at Lm47,500 and Lm41,000 respectively. Prime areas such as Sliema registered averages at Lm85,000 and Lm50,000.

Furthermore, over the years, the affordable accommodation floor area has been shrinking, with a three-bedroom apartment in 1982 having an average floor area of 135sqm, reducing by 2008 to 115sqm, whilst a two-bedroom apartment in 1982 had an average floor area of 95sqm reducing to 80sqm by 2008.

The 2005 Housing Census lists the number of rooms per person at 2.5. On a European level, this varies from a low of 1.4 persons per room to a high of 2.6 persons per room. Malta's accommodation is at par with the Netherlands, UK, Luxembourg, Austria, Belgium, Denmark, Sweden, France and Ireland, whilst it is superior to accommodation in Finland, Germany, Greece, Italy, Portugal and Spain.

UP-MARKET HOUSING

According to Camilleri, Maltese up-market developments average around €5,000/sqm, to be compared with similar developments in London at €17,500/sqm, and Dublin and Paris at €9,500/sqm. Madrid, Sydney and Croatia attract the same Malta price tag, Phuket and Cape Town attract half the price, while Bulgaria attracts a quarter of the price. The wealthiest location is Monaco at €35,000/sq m (Knight Frank, 2008).

The prime residential property market is not subject to the same market influences as that of the affordable market. "As wealth increases, luxury products and services continue to rise in value, as they are more desirable, the more expensive they are, with prime property being the ultimate product."

HOUSING AFFORDABILITY INDEX (HAI)

Table 2 notes the HAI calculated for the period 1982–2008. For a three-bedroom median apartment, the HAI had in 2007 at 74 slid down from the previous year's 79. The worst period was in 1997 at 65, coinciding with the introduction of VAT in 1995. Over the years it has always appeared affordable to purchase a two-bedroom median apartment, with the HAI peaking to 123 (1987) and dipping to 101 (1997). With the present low mortgage rate era and decline in property values as anticipated up to 2012, an HAI extrapolation for 2012 works out at 138. This signifies that for Malta, the global credit crunch is beneficial to the first time homeowners. An improvement in the quality of life of the Maltese family is expected to occur, as a main job should be sufficient to support the ownership of one's home.

This has happened even before 2012, that a Maltese household does not require to work overtime to own their own home. In fact, for the first time in 2009 a three-bedroom apartment is affordable as the HAI has gone above 100 at 112.

RESIDENTIAL DEVELOPMENT PERMITS

Based on information obtained from the Malta Environment and Planning Authority (MEPA), there has been a surge from the year 2000 onwards in the number of residential permits issued (see Table 3). The author asks: has this increase in supply addressed the problems of affordability?

Although there has been a slowdown in the home ownership rate, this does not appear to have deterred developers from undertaking residential developments. The number of permits issued over this period is to be compared to the Housing Requirement. A housing demand calculation undertaken in MEPA's Housing Topic paper (2002) stands at 2,850 units required per annum indicating that over the past five-year period, a higher supply had been provided, with possibly the increase in demand not being matched.

When one considers that the number of marriages over the period has averaged out at 2,250 annually, with separations/annulments averaging at 375 annually, it is expected that, in the coming years, the number of building permit applications for residential units will again revert to the pre-2002 figures.

The report also looks at the history of the control of building heights locally and its impact on housing supply. The Town Planning Schemes of the 1960s mostly indicated two floors above ground level, contributing to the predominantly low-lying compact urban form typical at the time. The Town Planning Schemes of 1988 indicated statutory building heights of two floors in most urban areas and four floors in exceptional cases. However, they included six- and eight-storey building heights for Sliema and St Julians.

"In 1993, a revision to the building heights policy allowed an additional floor in areas outside urban conservation areas with a height limitation of two floors, subject to certain conditions. In these same areas, together with areas that already had a height limitation of three floors, the recent amendments permitted an additional penthouse construction on a building height of three floors, instead as previously, allowed over four floors."

These planning policies have resulted in a reasonable residential density notwithstanding Malta's high population density standing at 1,298 persons per km2. From a MEPA study (2002), the residential units per hectare vary from 8 up to 80, whilst the number of residents per hectare varies from 25 up to 150. This contrasts greatly with Singapore, for example, which has a population density of 5,454 persons per km2, and a national average residential density at 142 units per hectare, with 82% of the population living in high-density housing at 215 units per hectare.

FOREIGN PROPERTY BUYERS

Since 1974, when a foreigner purchased property in Malta, such transaction requires registering via a law known as the immovable prop-

erty (acquisition by non-residents) Acquisition Immovable Property (AIP) Act. Just over 14,000 permits have since been registered, that is an average of 406 permits per year. These foreign resident purchases, peaked in 1989 at 899, then plummeted to 155 in 1998. The report indicates that towards the end of the report period, foreign buyers were purchasing property in the up-market range, peaking in 2005 at Lm971/sqm as compared to the affordable rate at Lm442/sqm.

Commenting on 2002 to 2007 AIP data available, the author outlines that of the 4,574 permits granted to 86 nationalities, 70% of purchasers were British. These are followed by Irish buyers at 3.75%, Italians and Russians at 3%, and Americans, Dutch, Germans and French each averaging out at 2 per cent. From further AIP data over the same period, the Sliema/St Julians area at was the most sought after with 28.75% of purchases by foreigners, followed by the St Paul's Bay area at 21% and Mellieha at 9%.

VACANT DWELLINGS

The number of vacant dwellings in 2005 stood at 53,120, up from the 1995 number of 35,723. Thus, in 1995, 23% of total dwellings were vacant, whilst in 2005 this increased to 27.6%. Of these vacant units, one fifth are listed as holiday dwellings. The 2005 Census states that 43.4% of these vacant dwellings were in a good state of repair, 21.3% needed only minor repairs, whilst 5,274 units were in shell form, with a small percentage in a dilapidated condition. 65% of these vacant dwellings consisted of flats, maisonettes and penthouses.

Historically, this is not uncommon. According to the various census exercises carried out since 1861, vacancy rates were generally within the 20 to 30% range. The report also notes high vacancy rates at 23.1% in Cyprus, 35.44% in Greece and 29.5% for Portugal - these countries, like Malta, embrace good family ties, resulting in residential hoarding their offspring. At the other end of the scale, Sweden has a vacancy rate of 1.67%, the Netherlands at 1.97% and Luxembourg at 2.3%.

"For the proper functioning of the property market, a 4-5 per cent of vacant stock is necessary. Thus, the above European statistics indicate that where the vacant percentage is below the 5 per cent mark, the market works inefficiently. Nevertheless, is this inefficiency carried over when the vacancy rate is as noted above, being in the region of a quarter of the total housing stock available? Considering Malta's scenario, this does not appear to be the case for the proper functioning of the property market, as property hoarding appears to be a favoured investment medium, due to property's perceived capital growth rates. This appears to be also corroborated by Cyprus, Greece and Portugal."

It had been noted by Hoekstra and Zad (2006) that Mediterranean countries are characterised by specific phenomena that contradict economic theory: high vacancy rates go together with high house prices, a high housing production rate, and a high rate of home-ownership. "Thus, a high property vacancy rate has more of an adverse effect on our surroundings and built environment, considering our limited size, than on the proper functioning of the property market. On the plus side, these vacant properties would come to good use in the scenario that a natural disaster befalls Malta, as the homeless would then not find accommodation for years on end in tents or makeshift premises."

SUSTAINABLE HOUSING

Malta's national report on sustainable development presented to Johannesburg 2002 notes that "the construction industry should be directed to improve design for thermal efficiency and to adopt energy saving measures prior to being granted development permission. In this regard, there is the need to step up funding for research to improve knowledge on local materials and conditions." Document F Technical Guidance on Conservation of Fuel, Energy and Natural Resources (minimum requirements on the energy performance of building regulations, 2006) was issued by the Services Division Building Regulations Office Malta through a Legal Notice in 2007. However, the author notes, "as capital costs add onto the building constructions, this would further affect their affordability, although green buildings have been quoted as being more affordable, as they can cut down on heating/cooling costs." He commends the Housing Authority on its initiative to construct an energy efficient block, while noting that "the economics of sustainable construction in Malta is still not delved into, whilst new cheaper sustainable forms of construction (are) yet to be introduced."

Globigerina limestone is an obvious choice of building material. Being a natural material "it is healthy, enduring and attractive", and poses little pollution risk. Quarrying, however, is visually and ecologically damaging, with large transportation energy costs involved. Camilleri notes that for buildings to be sustainable, the materials are ideally site produced or sourced within a radius of 10 km. Stone buildings can be more sustainable with particular emphasis given on the mode of quarrying/transporting the material to site with reduced dust production, together with greater importance given to its re-use.

"A glass clad high-rise building using as much energy as a whole town is not a sustainable solution for Malta. Local materials require the use of thermal mass to average out temperature variations. The West façade requires a closed gable wall, whilst the South wall should take advantage of the low winter sun for lighting and shading provided for the high summer sun. Orientation together with natural ventilation principles can reduce the energy intake by 30 per cent. It is possible to achieve thermal comfort by passive means not involving the use of energy. The utilization of basements as a passive form of cooling to the upper floors is virtually unknown. The internal yard concept, although appreciated, has lost its planning appeal. A residence requiring air conditioning for its comfort may be considered a design disaster. A good climatic orientation taking ventilation advantage of light breezes, a light coloured roof top, the provision of ceiling fans, together with humidity reduction with the help of a dehumidifier should create a comfortable environment for most days of the year."

Camilleri continues to note that "sustainability involves a frame of mind that thinks long-term rather than short-term. This strategic long termism should take account of the way individual buildings may adapt to the changing needs of occupants – perhaps with the onset of illness or as an individual's age. Thus, it is noted that sustainable housing is not just an exercise in low energy design but brings together physical, social and cultural factors into a single agenda (Edwards and Hyett, 2001)."

CONCLUSIONS

Malta fits in within the Mediterranean housing context, characterised by high home-ownership rates which have increased steadily over the past 40 years. This has in turn led to above normal housing price growths and a supply that exceeds the needs of the population, fuelled by the demand for second homes by locals, together with foreigners attracted by our mild climate. Another characteristic is a high vacancy rate, which does not appear to interfere with the proper functioning of the market.

On the other hand, Malta varies from the Mediterranean setting in that its housing accommodation size is closer to that found in the northern countries. Another sector where divergence is again noted from its southern neighbours is in its larger amount of social housing provided.

The slowing down of the home ownership rate expected over the coming 50-year period may lead to a higher rental demand in future, alluring to a higher mobility factor, with more Maltese nationals taking up jobs abroad. The deregulation of the rental market, which should lead to a more efficient free open rental market, should translate into lower rentals; thus the rental option will further improve, as compared to the financial strain on taking out a mortgage. This should help towards preventing further households falling below the poverty line, so important for when the household's income goes below a certain proportion of the annual median wage.

The present excess housing supply on the market should address a required cooling period in house price growth. Expectations for addressing the affordable price differential from the trend value should occur within the coming three-year period. This cooling off period is not to be as drastic in prime property, with the wealth phenomenon fuelling the demand for luxury property.

**Lm1 (one Maltese Lira) is equivalent to €2.33. Malta joined the Eurozone in 2008, that is at the end of the report period.*

Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Approved permits	4,229	3,351	3,411	3,004	2,273	2,369	4,180	4,481	6,128	6,707	9,081

Table 3 – Development permits for dwellings. Source: MEPA