

Inflation Report

July 2010

Economic Policy Department
July 2010

This document has benefitted from the contribution of the Economics and External Relations Division of the Central Bank of Malta.

Statistical information available up to 17th May 2010, has been included in this document.

The following symbols have been used throughout this document:

. . . to indicate that data are not available;

0 to indicate that the figure is zero;

- to indicate that data are not applicable or cannot be determined;

— to indicate that the figure is negligible;

Figures may not add up due to rounding.

Contents

	page
Foreward	v
1. Review of Inflationary Trends.....	3
1.1 Consumer Price Inflation	3
1.1.1 Inflation Developments	3
1.1.2 Inflation Persistence	8
1.1.3 Contributions to Inflation at Detailed Product Level	10
1.1.4 Benchmarking Malta's Inflation Rate	12
1.2 Developments in Other Prices	21
1.2.1 Asset Prices	21
1.2.2 Industrial Producer Prices	24
1.2.3 Terms of Trade	27
2. Macroeconomic Analysis of Inflation Developments	33
2.1 The Impact of Demand and Supply Factors	33
2.1.1 Inflation and Demand Conditions	33
2.1.2 Credit Developments	35
2.1.3 Real GDP Growth	39
2.1.4 Consumption	39
2.1.5 Investment	40
2.1.6 Government Spending and the Fiscal Stance	41
2.1.7 The International Economy and Export Performance	42
2.1.7.1 Recent Economic Developments in Malta's main Trading Partners	42
2.1.8 Conclusion	43
2.2 Potential Output and Inflation	43
2.2.1 Inflation and the Labour Market	44
2.2.2 Potential Output Growth	46
2.2.3 Conclusion	46
2.3 Costs	47
2.3.1 Labour Costs	47
2.3.2 Inflationary Developments in Malta's Major Trading Partners	49
2.3.3 Administered Price Inflation	52
2.3.4 Profit Margin	53
2.3.5 Conclusion	54
3. Outlook for Inflationary Pressures	59
3.1 International Macroeconomic Developments	59
3.2 Exchange Rates and Commodities	62

3.3 Outlook for Inflationary Developments in Malta	64
--	----

Boxes

1.1 The New RPI Weighting Scheme	5
1.2 A Comparison of the RPI and the HICP	13

Tables

1.1 Main Contributors to Inflation in Q4 2009	9
1.2 Main Contributors to Change in the Inflation in Q4 2009 by Ranking	10
1.3 Main Contributors to Inflation in Q1 2010	11
1.4 Main Contributors to Change in the Inflation in Q1 2010 by Ranking	12
2.1 Credit to Residents	36
2.2 Credit to Other Residents	37
2.3 Expenditure Components of Real GDP	40
2.4 Domestic Demand in Malta's Main Trading Partners	43
2.5 Growth Rates in Value Added	54
3.1 Demand Components in th EU and the Euro Area	60
3.2 Key Indicators	61

Charts

1.1 RPI Inflation	3
1.2 Annual Contribution to Inflation by Sub-index	7
1.3 Headline and Core Inflation Rate in Malta	8
1.4 The Inflation Rate in Malta, EU-27 and the Euro Area	14
1.5 Average HICP Inflation by Component 2004-2009	15
1.6 Average Contribution to Inflation 2004-2009	16
1.7 HICP Annual Inflation	16
1.8 Energy	17
1.9 Unprocessed Food	18
1.10 Processed Food	18
1.11 Non-Energy Industrial Goods	19
1.12 Services	19
1.13 Residential Property Prices	21
1.14 Malta Stock Exchange Share Index	23
1.15 MSE Share Index and HICP	23
1.16 Industrial Producer Prices - by Main Industrial Grouping	24

1.17 Industrial Producer Prices - by Country/Region	25
1.18 Domestic Industrial Producer Prices - by Main Industrial Grouping	26
1.19 Terms of Trade Index (2000 = 1)	27
1.20 Income Terms of Trade (percentage change)	28
1.21 Terms of Trade Index (2000 = 1)	29
1.19 Income Terms of Trade Index (2000 = 1)	29
2.1 Output Gap.....	34
2.2 Output Gap and Inflation	35
2.3 Credit to Residents (annual percentage changes)	37
2.4 Annual Private Sector Loan Growth	38
2.5 Contributors to Real GDP Growth 2009.....	39
2.6 Primary Balance (as a per cent of GDP).....	41
2.7 Unemployment Rate	44
2.8 Demographic Developments and Labour Supply Growth.....	45
2.9 Nominal Unit Labour Cost Growth	48
2.10 Inflation Developments in Malta's Major Trading Partners	50
2.11 Monthly average Fuel Oil Price per tonne	51
2.12 Monthly Euro Exchange Rate	51
2.13 Administered Price Inflation	53
3.1 FAO Food Price Index	63

Foreword

As announced in the Budget Speech for 2010, the Ministry of Finance, the Economy and Investment has prepared a report detailing price developments in Malta. The Report has been prepared by the Economic Policy Department within the Ministry in close collaboration with the Central Bank of Malta and the National Statistics Office. The analysis is based on statistical information available up to the 17th of May 2010.

In order to give a broader picture of inflationary developments in Malta, this first report reviews trends since 2004. This timeline was chosen as it coincides with Malta's accession in the EU, which constituted the first step towards adoption of the Euro in 2008. The report analyses in more detail recent developments in the last quarter of 2009 and the first quarter of 2010. In order to understand further the context of this economic phenomenon, the report presents the developments in asset prices, producer prices and import and export prices in view of their importance in the overall price formation process. In addition the report analyses the developments in macroeconomic factors that may affect inflation. The report concludes with an outlook for inflationary pressures, which includes a review of international macroeconomic developments in view of the openness of the Maltese economy and its sensitivity to external developments.

Review of Inflationary Trends

Throughout the period under review, the inflation rate in Malta, as measured on basis of the Retail Price Index, appears to have been strongly affected by developments in the food, housing, water, electricity, gas and other fuels and transport and communications sub-indices. Taking into consideration the developments over the period January 2008-March 2010, the inflation rate peaked at 4.4 per cent in April 2009, and was recently on a downward trend with the headline inflation in December 2009 standing at 2.1 per cent, decreasing further to 1.3 per cent in March 2010. When analysed on an annual basis, the inflation rate turned negative during the fourth quarter of last year, however turning positive again during the first quarter of 2010, standing at 0.3 per cent in March. The Report provides a detailed analysis regarding the drivers underpinning these trends.

Meanwhile when compared to trends in the European Union, the twelve-month moving average inflation rate in Malta, as measured on basis of the HICP was generally higher than the Euro Area average, and by a significant margin in early 2009. Since then although the gap has narrowed, in March it was still

0.9 percentage points higher. Recent trends in the annual rates of inflation at a component level indicate an element of stickiness in domestic prices as inflation in processed and unprocessed food tended to be significantly higher than in the Euro Area during the first half of last year. Inflation in energy products was also significantly higher.

As regards asset prices, data on advertised prices for residential property compiled by the Central Bank of Malta indicates signs of stabilization in the market as the rate of decline in prices appears to have slowed down to -1.4 per cent in the last quarter of 2009. As regards equity prices, the MSE share index recovered during the last three quarters of 2009 and in January 2010, however a slight dip was registered in the following three months.

Developments in producer prices are indicative of deflationary pressures during the last quarter of 2009 and the first quarter of 2010. The decrease in the overall producer price index was mainly a reflection of prices received by domestic producers for their exported output as a result of lower global demand for intermediate goods and consequent competitiveness pressures. At the same time, energy prices have had a significant impact on the trends in producer price inflation, as the reversal of the downward trend observed in first quarter of 2010 coincided with the revision in energy tariffs.

Over recent years, prices of imported goods rose at a faster rate than prices of exported goods resulting in a worsening in the terms of trade. In addition, the worsening in the income terms of trade suggests a deterioration in competitiveness in manufacturing. In contrast, despite the improvement in the terms of trade in services, which could suggest a decline in relative price competitiveness, income terms of trade for services still continued to improve, suggesting that Malta still enjoys a comparative advantage in services, especially in certain niche sectors as financial services and on-line gaming. These trends are in line with structural economic developments as Maltese economy became more services-oriented.

Macroeconomic Analysis of Inflation Developments

On the basis of an analysis of the business cycle, credit developments, demand components of GDP and fiscal policy, it is evident that whilst some signs of recovery are emerging, aggregate demand conditions remain weak and the economic outlook continues to be subject to a high degree of uncertainty. The Maltese economy continues to perform in a situation of a negative output gap suggesting that demand pressures on inflation remain low and are expected to

remain subdued in the short term.

An analysis of the supply conditions of the economy suggests that spare capacity may be present in the Maltese economy as a result of the fall in aggregate demand. There also appears to be an increasing slack in the labour market which is consistent with subdued wage and inflationary pressures. Nevertheless if the decline in investment in the capital stock persists, this would affect negatively the productive potential of the economy. Furthermore, if the increase in unemployment becomes structural, this could result some constraints to growth from the labour market. In this context, it is noted that long-term unemployment has increased slightly.

An analysis of the cost side of the economy indicates higher labour costs but lower profits during the first two quarters of 2009. These trends were reversed during the last two quarters of the year as developments in the labour market responded to the negative growth in real GDP experienced during the first three quarters of the year, indicative of some degree of flexibility in the labour market, particularly in the export oriented sectors of the economy. Nonetheless, on aggregate, unit labour costs during 2009 were still on the increase. Administrative price inflation declined sharply during the second half of 2009 mainly in reflection of a base-effect related to the date of the introduction of the water and electricity tariffs. Nevertheless, administrative price inflation was on the increase in the first quarter of 2010, reflecting the increase in utility tariffs as from the beginning of the year. Meanwhile, consumer prices of food and producer prices in Malta's major trading partners were noted to be on the decline, suggesting that imported inflation is unlikely to be a driver of local inflation for these categories.

Outlook for Inflationary Pressures

The global economy is undergoing a mild recovery albeit there are still significant downside risks to the growth prospects. Even if the speed of recovery is expected to differ among Malta's trading partners, however growth in these economies is still expected to remain below potential. Thus, inflationary pressures in Malta's main trading partners are expected to be modest mostly because of spare capacity and still weak labour market. In view of the links between fluctuations in the exchange rate and imported inflation, the recent and expected weakness of the euro vis-à-vis the US Dollar and the UK Sterling may result in higher imported inflation both in terms of the cost of commodities purchased in US Dollars and in terms of imports from the UK.

Subject to the gradual recovery in the global economy, the Maltese economy is expected to improve. However, the labour market is still expected to remain subdued as it responds with a lag effect to developments in GDP. In view of the spare capacity characterising the current phase of the business cycle, it is unlikely that in the short term, inflationary pressures build up as a result of unfulfilled demand and tight labour market. At the same time one also notes that utility prices in Malta are expected to remain stable during the current year in line with Government's policy of keeping unchanged utilities' prices over an agreed period so as to minimise as much as possible uncertainty derived from frequent changes in prices. On the other hand, moderate pressures from imported inflation could be present as the modest increase in commodity prices, in particular food and energy might be compounded by the expected weakening of the euro.

1. Review of Inflationary Trends

1. Review of Inflationary Trends

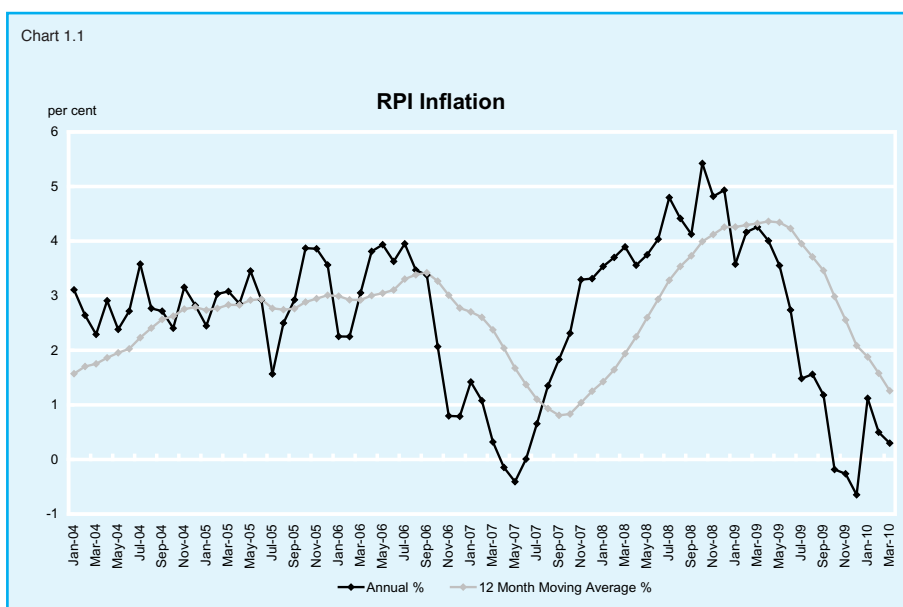
1.1 Consumer Price Inflation

1.1.1 Inflation Developments

This section will provide an analysis of trends in inflation since 2004, with an emphasis on the developments in the last quarter of 2009 and the first quarter of 2010. The choice of the period of analysis coincides with Malta's accession into the European Union and therefore the first steps towards Malta's adoption of the Euro in 2008. It is important to underscore that price stability is one of the key policy objectives in the Euro Area (EA). In particular, the European Central Bank's definition of price stability is a medium term inflation target below the rate of 2 per cent.

Review of Developments 2004-2009

The overall rate of inflation, as measured by the twelve month moving average of the Retail Price Index (RPI), was relatively stable over the 2004-2006 period, but its variability increased during the second half of the period under review.¹ Chart 1.1 illustrates the trend observed in the RPI inflation between the period January 2004 and March 2010.



Between January 2004 and September 2006, that is over a span of 33 months, the 12-month moving average was generally on a moderate upward trend. The increase in the inflation rate was more marked during 2004, rising from 1.6 per cent in January to 2.8 per cent in December 2004. Subsequently, it rose slightly to 3.0 per cent in December 2005 and increased further to reach 3.4 per cent in September 2006.

Subsequently, in the 12-month period up to September 2007, the inflation rate decreased significantly to 0.8 per cent in September 2007. This decrease was mainly attributable to developments in the transport and communications, water, electricity, gas and fuels and clothing and footwear sub-indices.

This downward trend was reversed with headline inflation rising sharply to 4.3 per cent in December 2008 and peaking at a rate of 4.4 per cent in April 2009. This strong upward trend was mainly in reflection of developments in the food, water, electricity, gas and fuels, clothing and footwear and transport and communications sub-indices. As described in more detail below, recent developments in inflation indicate a generally downward trend with the headline rate for December 2009 standing at 2.1 per cent. The inflation rate continued to decrease during the first months of 2010 with the headline rate standing at 1.3 per cent in March 2010.

Throughout the entire period under review, inflation in Malta appears to have been strongly affected by the developments in the food, housing, water, electricity, gas and other fuels and transport and communications sub-indices. Developments in the water, electricity, gas and other fuels sub-index were affected by the significant volatility in the international price of oil during the period under review, as well as by efforts to reduce the reliance on government assistance in the utilities sector, so as to improve the financial sustainability of the energy utility operator. Developments in the international price of oil also affected the price of fuel at the pump. Another factor that affected inflationary developments in Malta over the period under review was the price of food. In particular, one should remark that over the course of 2007/08 the international price of food commodities increased considerably, and food prices were a major contributor to domestic inflation during 2008 and the first months of 2009. One also notes that the housing sub-index was also an important contributor to inflation in the years under review owing mainly to higher prices of various construction works and dwelling maintenance and repairs services. On the other hand, lower prices of clothing and footwear, owing the global shifts in production to low-cost locations in Asia and other developing countries resulted in negative contribution to inflation in a number of years as observed above.

Recent Developments

This sub-section reviews trends in the annual rate of inflation in the 4th quarter of 2009 and the 1st quarter of 2010.² It is pertinent to note that as from January 2010 the National Statistics Office started to publish the Retail Price Index on the basis of updated weights in reflection of the results emanating from the new Household Budgetary Survey as described in Box 1.1.

The 12-month moving average inflation rate decreased significantly during the last nine months of 2009 falling to 2.1 per cent in December. This downward trend reflected the developments in the annual rate of inflation that fell sharply during the second half of 2009, from around 2.7 per cent in June to 1.2 per cent in September. The annual inflation rate turned negative in the last quarter of the year, standing at -0.2 per cent in October and decreasing further to -0.3 and -0.7 per cent in November and December, respectively.

As shown in Chart 1.2, the deceleration in inflation in the last quarter of 2009 mainly reflects developments in the food sub-index, from a strong positive contribution to inflation to a negative contribution in December 2009. Other important contributors to this trend were water, electricity, gas and fuels,

Box 1.1

The New RPI Weighting Scheme

The official inflation rate in Malta is established through the Retail Price Index (RPI), which can be explained in terms of a basket of goods and services consumed by the typical household. The RPI measures price movements in this 'fixed' basket. The RPI is the yardstick used for the Cost of Living Adjustment (COLA). This index is monitored on a monthly basis by the Retail Price Index Advisory Board.

The RPI weighting scheme indicates the relative importance of each individual item covered in the 'fixed' basket of goods and services, i.e. the share of household spending on different items. The Household Budgetary Survey (HBS) constitutes the primary source in the construction of the RPI weighting scheme. In view of changing household spending patterns over time, it is important to periodically update the RPI weighting scheme. To this end, a Household Budgetary Survey (HBS) was conducted between March 2008 and February 2009.

Following the formal approval of the RPI Advisory Board, as from January 2010, the National Statistics Office started to publish the Retail Price Index on the basis of updated weights in reflection of the results emanating from the new Household Budgetary Survey.

RPI Weighting Schemes

	per cent	
	2003	2010
1 Food	23.82	21.23
2 Beverages and Tobacco	6.11	6.09
3 Clothing and Footwear	8.24	7.41
4 Housing	7.57	7.61
5 Water, Electricity, Gas and Other Fuels	2.25	3.36
6 Household Equipment and House Maintenance Costs	7.65	6.59
7 Personal Care and Health	6.22	8.57
8 Transport and Communications	23.13	22.76
9 Recreation and Culture	8.84	9.28
10 Other Goods and Services	6.17	7.1
Total	100.00	100.00

Source: NSO and EPD Workings

Chart 1

RPI Weights 2003-2010: A Comparison

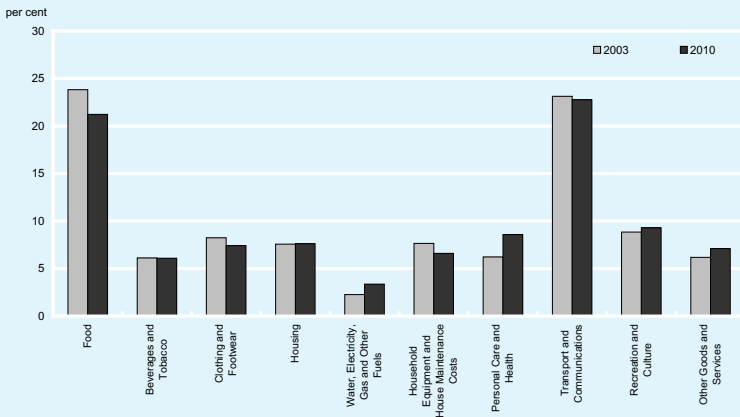


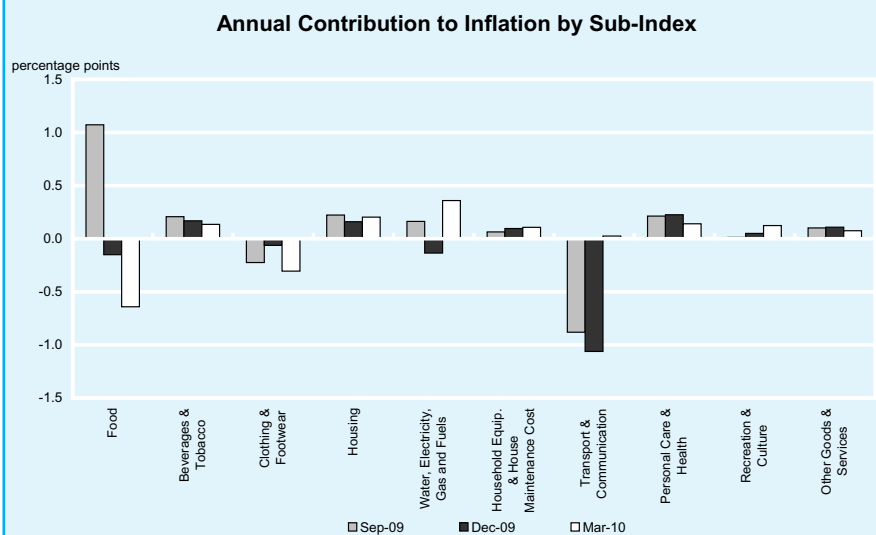
Table 1 and Chart 1 compare the new weighting schemes at group level with the previous one which was established in 2003. The main differences between the two weighting schemes can be summarised as follows:

1. The expenditure on Water, Electricity, Gas and Fuels rose substantially over the period under review mainly due to the rise in domestic tariffs.
2. An increase was registered in the expenditure on Personal Care and Health. The main causes were higher expenditure on medicines, and a prevailing tendency for people being more health and image conscious.

Box 1.1 cont.

3. The larger weight for the ‘Other Goods and Services’ category was mainly brought about by a rise in expenditure on insurances.
4. On the other hand, the relative importance of the group ‘Household Equipment and House Maintenance Cost’ diminished. This may be the result of more competition from imports following Malta’s EU entry as regards home furnishings and the fact that dwellings, on average, are becoming smaller.
5. Although the weight on transport and communications remains relatively unchanged, an interesting shift occurred at a detailed level. Expenditure on communication services advanced since 2003, but this was offset by the drop registered in transport, caused primarily by the more competitive air transport market.
6. Over the period under review, in line with the trend over the past four decades, the weight of food has decreased, although spending on food remains substantial. This is in line with international trends, whereby as countries develop one tends to observe the proportion of household expenditure devoted to food to decline.

Chart 1.2



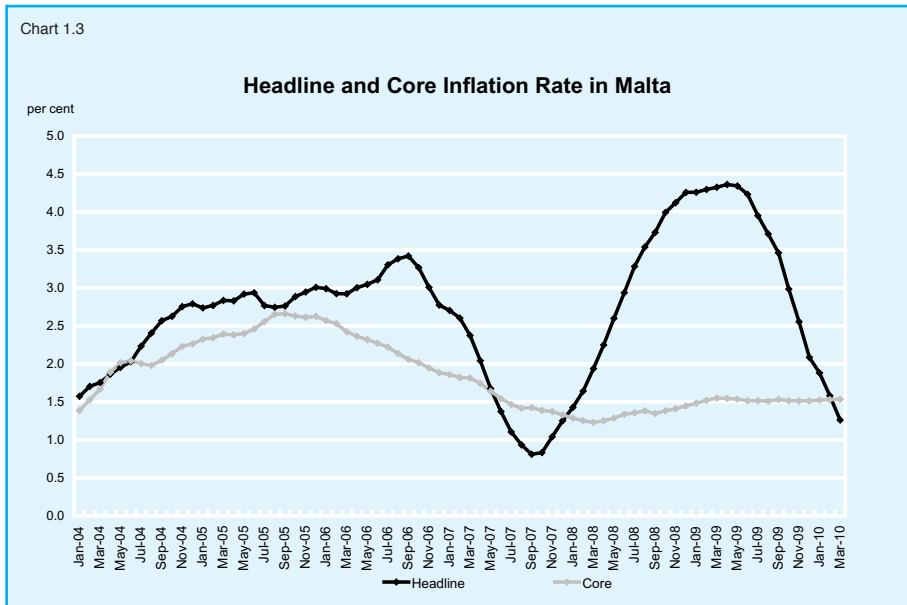
transport and communications and to a lesser extent housing. On the other hand, clothing and footwear contributed positively to inflation by recording a smaller negative contribution.

Meanwhile, during the first quarter of 2010, the 12-month moving average inflation rate continued to decline to 1.3 per cent in March. On an annual basis, the inflation rate rose significantly and returned to positive territory. It stood at 1.1 per cent in the month of January, before decelerating over the following two months to 0.3 per cent in March. The rise in the annual rate of inflation mainly reflected higher prices for water, electricity, gas and fuels and transport and communication that was partly mitigated by lower prices of food and clothing and footwear.

1.1.2 Inflation Persistence

An important measure of inflationary pressure is core inflation. Core inflation measures underlying inflation, i.e. inflation excluding the influence of certain items that face volatile price movements. In this instance, core inflation is in accordance to the measure adopted by the Central Bank of Malta, as outlined in Quarterly Review 2004:2 (Vol. 37: 2).³

As shown in Chart 1.3, for a good part of the period under review, core inflation in Malta was lower than headline inflation, with the greatest gap recorded during the second quarter of 2009. Over the first part of the period under review,



core inflation in Malta, measured as a 12-month moving average, exhibited an upward trend, reaching a peak of 2.7 per cent in September 2005. Subsequently, it declined gradually, reaching around 1.5 per cent by the end of 2007 and has remaining generally stable thereafter. It is also noteworthy that in view of the declining trend in the annual rate of RPI inflation since the second half of 2009, the gap between the headline and core inflation started to narrow and core inflation has exceeded headline inflation during the months of February and March 2010.

Thus concluding, one notes that with the exception of February and March 2010, core inflation was lower than headline inflation over the period under review. It is evident that the volatility in headline inflation since the end of 2007 is not reflected in the core inflation largely because the main drivers of inflation during that period were food and energy-related items. It is also noteworthy that core inflation has declined in recent years, especially in comparison to the

Main Contributors to Inflation in Q4 2009

Table 1.1

	Weight	Contribution to inflation (pp)	
		Sep-09	Dec-09
All items	1,000	1.18	-0.65
Tests and licences	0.81	0.26	0.26
Gas	0.23	0.22	0.22
Maintenance and repair services of cars	1.69	0.10	0.16
Education expenses	1.22	0.06	0.11
Cigarettes	1.89	0.10	0.10
Fresh bread and fresh pastry	1.28	0.09	0.09
Prepared and processed meat	1.20	0.17	0.08
Medical services	0.78	0.07	0.07
Various construction works	3.95	0.07	0.07
Furniture	3.32	0.03	0.07
Beef meat/Pork meat	1.40	0.09	0.06
Processed vegetables	0.79	0.05	0.06
Hygienic articles/Toilet preparations/Make-up articles	2.56	0.05	0.06
Fish, fresh or chilled	0.60	0.04	0.05
Prepared and preserved fish and seafood	0.55	0.07	0.05
Take-aways	1.68	0.05	0.05
Non-alcoholic beverages - off sales	1.80	0.04	0.05
Audio visual equipment	1.38	-0.07	-0.04
Alcoholic beverages - off sales	0.21	-0.04	-0.05
Books and newspapers	1.56	0.00	-0.07
Fruits, fresh or chilled	1.48	0.05	-0.07
Electricity charges	1.43	-0.04	-0.21
Fuels	3.76	-0.33	-0.23
Vegetables	1.01	0.13	-0.35
Air transport services	4.90	-0.29	-0.64
Motor cars	7.62	-0.68	-0.79

Source: NSO and EPD Workings

rates recorded during the second half of 2005.

1.1.3 Contributions to Inflation at Detailed Product Level

This sub-section will provide an analysis, at a disaggregated level of the main developments in inflation during December 2009 and March 2010 as well as the main drivers of inflationary developments during the last quarter of 2009 and the first quarter of 2010.

In December 2009, the annual rate of inflation stood at -0.7 per cent. As shown in Table 1.1, this was mainly driven by the negative contribution of motor cars, air transport services, vegetables, fuels and electricity charges, with the latter mainly reflecting a base effect related to the increase in tariffs in October 2008. These developments were partly countered by the positive contribution to inflation of tests and licenses (which includes car licenses and VRT tests), gas, maintenance and repair services of cars, education expenses and cigarettes.

The decrease in the inflation rate during the last quarter of 2009 is attributable to the developments in a number of items. As stated above, the deceleration in food prices was the principal contributor to price developments during the period under review and this mostly reflected decreases in the contribution to

Main Contributors to Change in the Inflation Rate in Q4 2009 by Ranking

Table 1.2

	Weight	Contribution to inflation (pp)		Difference	(-/+)
		Sep-09	Dec-09		
All items	1,000	1.18	-0.65		-1.83
Fuels	3.76	-0.33	-0.23		0.10
Boys' outwear	0.81	-0.07	0.00		0.07
Women's outwear	1.88	-0.07	0.00		0.07
Maintenance and repair services of cars	1.69	0.10	0.16		0.06
Women's footwear - with uppers of leather	1.13	-0.06	-0.01		0.05
Girls' outwear	0.97	-0.06	-0.01		0.05
Education expenses	1.22	0.06	0.11		0.05
Furniture	3.32	0.03	0.07		0.04
Audio visual equipment	1.38	-0.07	-0.04		0.03
Books and newspapers	1.56	0.00	-0.07		-0.07
Served meals and food	3.02	0.10	0.02		-0.08
Prepared and processed meat	1.20	0.17	0.08		-0.09
Motor cars	7.62	-0.68	-0.79		-0.11
Fruits, fresh or chilled	1.48	0.05	-0.07		-0.12
Water charges	0.53	0.13	0.00		-0.13
Electricity charges	1.43	-0.04	-0.21		-0.17
Air transport services	4.90	-0.29	-0.64		-0.35
Vegetables	1.01	0.13	-0.35		-0.48

Source: NSO and EPD Workings

inflation of vegetables, fruits, prepared and processed meats and served meals and food. In addition as shown in Table 1.2, other important contributors to the downward trend in inflation were air transport services, electricity charges, water charges and motor cars. The lower contribution from electricity and water charges reflects a base effect related to the increase in tariffs during October 2008 rather than an actual reduction in tariffs during the period under review.

On the other hand, price movements in certain clothing items and a smaller negative contribution from fuels were the principal items recording an increasing contribution to inflation during the fourth quarter of 2009.

In March 2010, the annual rate of inflation stood at 0.3 per cent. This mainly reflected the positive contribution of fuels, gas, electricity charges, milk and milk products, fish, maintenance and repair services of cars and education expenses. These increases were partly mitigated by the negative contributions of motor cars, vegetables, air transport services and fruits. The increases in fuel,

	Weight	Contribution to inflation (pp)	
		Dec-09	Mar-10
All items	1,000	-0.65	0.30
Fuels	3.76	-0.23	0.52
Gas	0.23	0.22	0.22
Electricity charges	1.43	-0.21	0.14
Milk and milk products	1.71	0.00	0.13
Fish, fresh or chilled	0.60	0.05	0.11
Maintenance and repair services of cars	1.69	0.16	0.11
Education expenses	1.22	0.11	0.11
Cigarettes	1.89	0.10	0.10
Various construction works	3.95	0.07	0.10
Furniture	3.32	0.07	0.07
Beef meat/Pork meat	1.40	0.06	0.04
Hygienic articles/Toilet preparations/Make-up articles	2.56	0.06	0.04
Prepared and processed meat	1.20	0.08	0.04
Household appliances (whether electric or not)	2.27	0.04	0.04
Jewellery, watches and clocks	0.57	0.04	0.04
Served meals and food	3.02	0.02	0.04
Processed vegetables	0.79	0.06	0.04
Alcoholic beverages - off sales	0.21	-0.05	-0.03
Telephone and telephone services	2.74	0.02	-0.03
Books and newspapers	1.56	-0.07	-0.04
Women's outdoor	1.88	0.00	-0.08
Men's outdoor	1.43	-0.02	-0.09
Fruits, fresh or chilled	1.48	-0.07	-0.13
Air transport services	4.90	-0.64	-0.22
Vegetables	1.01	-0.35	-0.44
Motor cars	7.62	-0.79	-0.44

Source: NSO and EPD Workings

Main Contributors to Change in the Inflation Rate in Q1 2010 by Ranking

Table 1.4

	Weight	Contribution to inflation (pp)		Difference (-/+)
		Dec-09	Mar-10	
All items	1,000	-0.65	0.3	0.95
Fuels	3.76	-0.23	0.52	0.75
Air transport services	4.90	-0.64	-0.22	0.42
Motor cars	7.62	-0.79	-0.44	0.35
Electricity charges	1.43	-0.21	0.14	0.35
Milk and milk products	1.71	0.00	0.13	0.13
Fish, fresh or chilled	0.60	0.05	0.11	0.06
Audio visual equipment	1.38	-0.04	0.00	0.04
Girls' outerwear	0.97	-0.01	0.01	0.02
Household textile articles	0.43	-0.02	0.01	0.03
Medical services	0.78	0.07	0.02	-0.05
Maintenance and repair services of cars	1.69	0.16	0.11	-0.05
Telephone and telephone services	2.74	0.02	-0.03	-0.05
Fruits, fresh or chilled	1.48	-0.07	-0.13	-0.06
Men's outerwear	1.43	-0.02	-0.09	-0.07
Fresh bread and fresh pastry	1.28	0.09	0.01	-0.08
Women's outerwear	1.88	0.00	-0.08	-0.08
Vegetables	1.01	-0.35	-0.44	-0.09
Tests and licences	0.81	0.26	0.00	-0.26

Source: NSO and EPD Workings

electricity and gas prices reflected upwards revisions in the prices for these items. Table 1.3 shows the main contributors to inflation during March 2010.

During the first quarter of 2010, the increase in the inflation rate measured on an annual basis reflected higher prices of fuels while other items such as electricity charges, milk and milk products, air transport services and motor cars contributed positively to inflation, with the latter two categories actually recording a lower negative contribution. Higher electricity charges reflected the revision in tariffs as from January 2010. On the other hand, as shown in Table 1.4, tests and licenses was the main negative contributor, followed by various items including vegetables, women's outerwear and fresh bread and fresh pastry. The negative contribution from tests and licenses is related to a base effect in reflection of changes in the tariff regime introduced in January 2009.

1.1.4 Benchmarking Malta's Inflation Rate

This subsection presents an international comparison of trends in the inflation rate in Malta on the basis of the Harmonised Index of Consumer Prices (HICP).⁴ In view of the analysis presented above, Box 1.2 outlines conceptual differences between the RPI and the HICP. Chart 1.4 shows plots of the 12 month moving

Box 1.2

A Comparison of the RPI and the HICP

Though at first glance the RPI and the HICP might seem very similar to each other there are important conceptual differences. This box is intended to shed light on the parities and disparities between the Retail Price Index and the Harmonised Index of Consumer Prices.

The main parities of the two indices are the following:

- Same geographic coverage;
- Reference to the country as a whole;
- Same price collection methodologies;
- Virtual homogeneity of items;
- Same outlets for price collection;
- Same price data;
- Use of the same formula for the computation of indices (Ratio of Arithmetic Mean prices within localities);
- Same treatment of seasonal items;
- Same treatment of missing prices and quality adjustment;
- Non-coverage of income tax and national insurance contributions.

Meanwhile, the main disparities are:

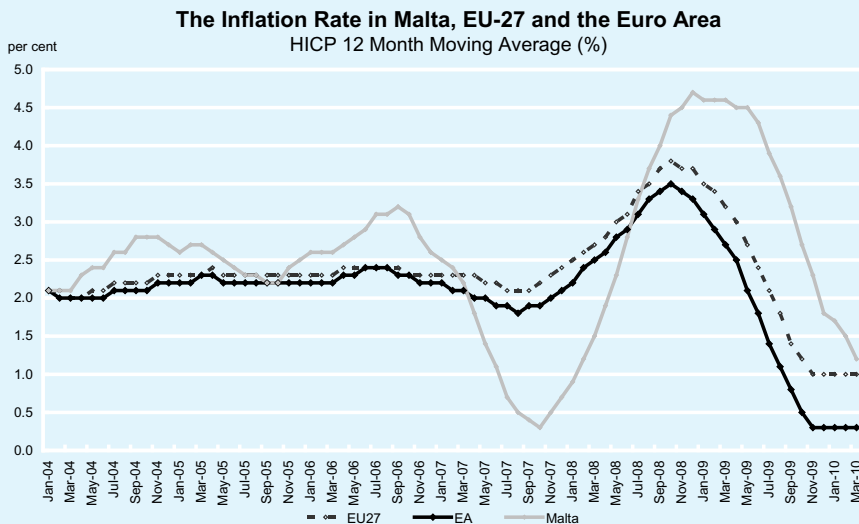
- The RPI has 10 sections while the HICP has 12 divisions¹;
- Newly significant goods can be introduced in the HICP but not in the RPI;
- Different weighting structure;
- The RPI and HICP weights add up to 100 and 1000 respectively;
- Different frequency of renewal and updating of weights;
- Tourist Accommodation and Social Protection indices feature in the HICP only;
- The reference period (base year) of the RPI is 2009 whereas the reference period of the HICP is 2005;

¹ The terms sections and divisions mean the same thing, however, a different nomenclature is used in defining the HICP and RPI groupings

Box 1.2 cont.

- The RPI and the HICP use different weighting schemes. The RPI weights refer to expenditure by private households and are largely based on data derived from the Household Budgetary Survey. The HICP weights cover private household expenditure, institutional household expenditure as well as tourism expenditure in Malta. The differences in the underlying weighting schemes between the RPI and the HICP account significantly for the disparities in their results on a monthly basis;
- Although both RPI and HICP are Laspeyres-type indices, the former is a Fixed-base index whereas the latter is a Chain-linked index;
- The RPI is monitored by the RPI Advisory Board, whereas the HICP is monitored by Eurostat.

Chart 1.4



average inflation for Malta, the EU-27 and the EA for the period January 2004 to March 2010. Over the period under review, whilst there are some common broad patterns, inflation in Malta was generally more volatile than in the EA and the EU. Furthermore, it was generally higher than inflation in the EA, except for the period ranging from April 2007 to June 2008.

During 2004, Malta’s inflation rate exceeded that of the EA by around 0.6 percentage points. Domestic inflation converged to the inflation rate in the EA and the EU during 2005, but the gap widened again in the first half of 2006, reaching 0.5 percentage points over the EA average in June 2006. Subsequently, Malta’s inflation declined rapidly and fell significantly below the EA benchmark in 2007. As from October 2007, the inflation rate was on a rising trend and has exceeded the EA average since July 2008. In particular, the gap was significant at around 2.5 percentage points during the period June 2009 to August 2009. As from September 2009, the gap started to narrow but domestic inflation remained above the EA average, with a gap of around 0.9 percentage points in March 2010.

Chart 1.5 depicts the average inflation in Malta, the EU-27 and the EA over the period 2004-2009. During this period, the average headline inflation in Malta stood at 2.5 per cent, compared to the EA average of 2.1 per cent. This difference mainly reflects higher inflation rate in Malta across all categories with respect to the EA. In particular, inflation rate in energy in Malta stood at 7.9 per cent, 3.2 p.p. higher than in the EA over the period 2004-2009. In

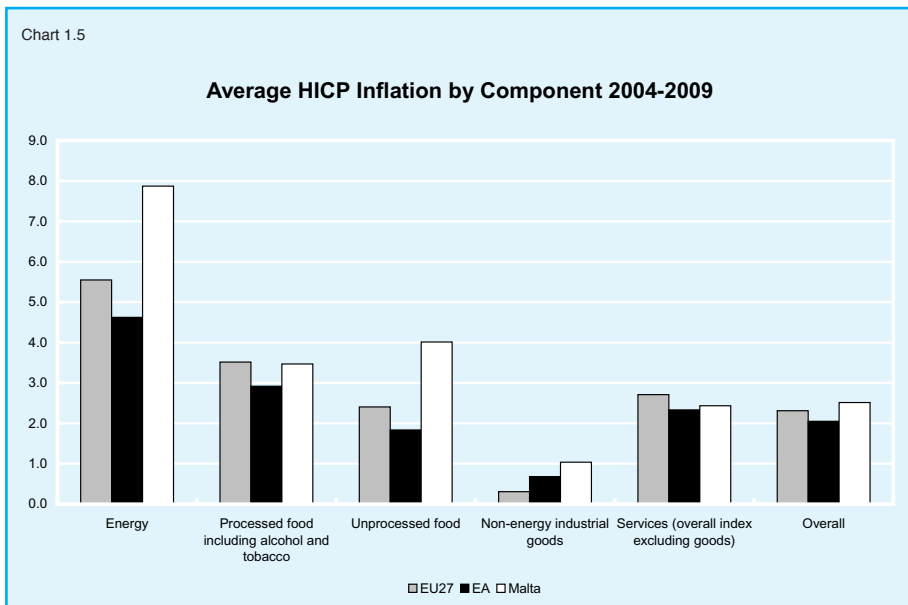


Chart 1.6

Average Contribution to Inflation 2004-2009

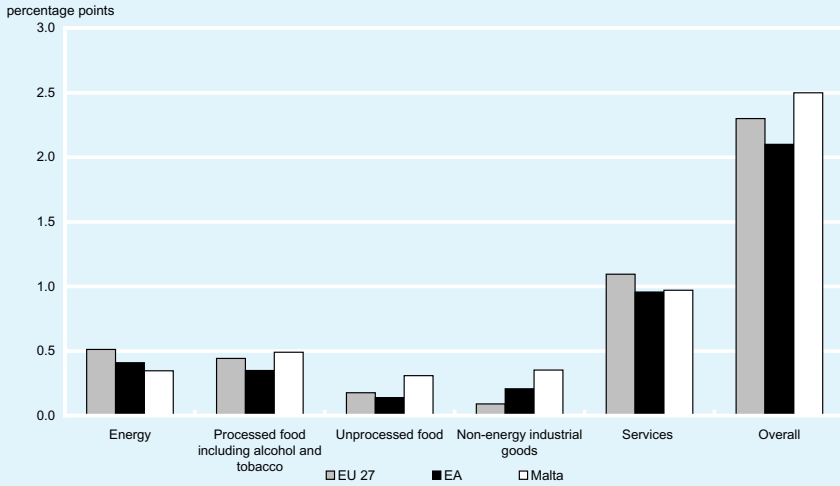
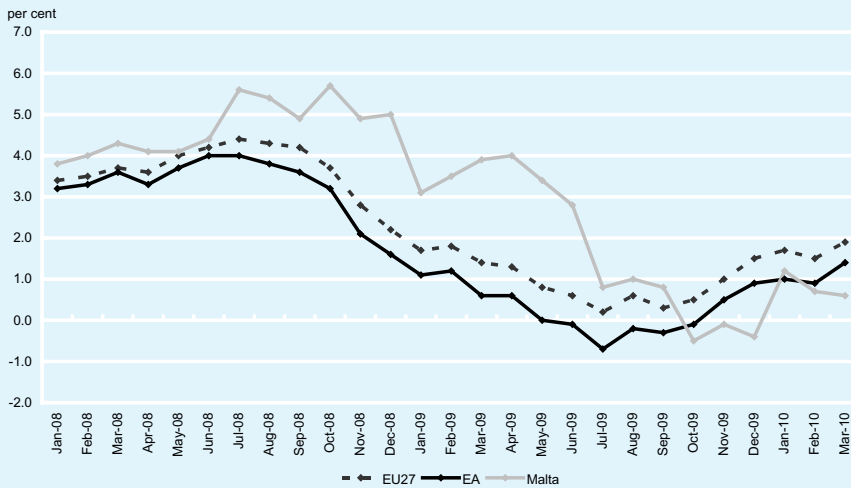


Chart 1.7

HICP Annual Inflation (%)



addition, the inflation rate in unprocessed food stood on average at 4.0 per cent, 2.2 p.p. higher than the average inflation rate recorded in EA. When compared to the EA, the strongest contributors to HICP inflation over the period 2004-2009 were processed food, unprocessed food and non-energy industrial goods as shown in Chart 1.6. The relatively lower contribution of energy reflects a smaller weight in the domestic index compared to EA average.

Charts 1.7 to 1.12 show plots of the year-on-year change in the HICP at the aggregate and main component classification for Malta, the EU (EU-27) and the EA over the period January 2008 to March 2010. Annual inflation rates reflect recent developments compared to the 12-month moving average rate depicted in Chart 1.4. During the same period, the annual rate of inflation in Malta was generally higher than the benchmarks defined above, though it has been mostly lower since the last quarter of 2009.

During the period January 2008-March 2010 the inflation rate for energy in Malta was on average around 7.1 per cent, significantly higher than the average for the period in the EA of 1.6 per cent. In fact the inflation rate for energy in Malta exceeded the EA average since mid-2008, with the exception of the last quarter of 2009.

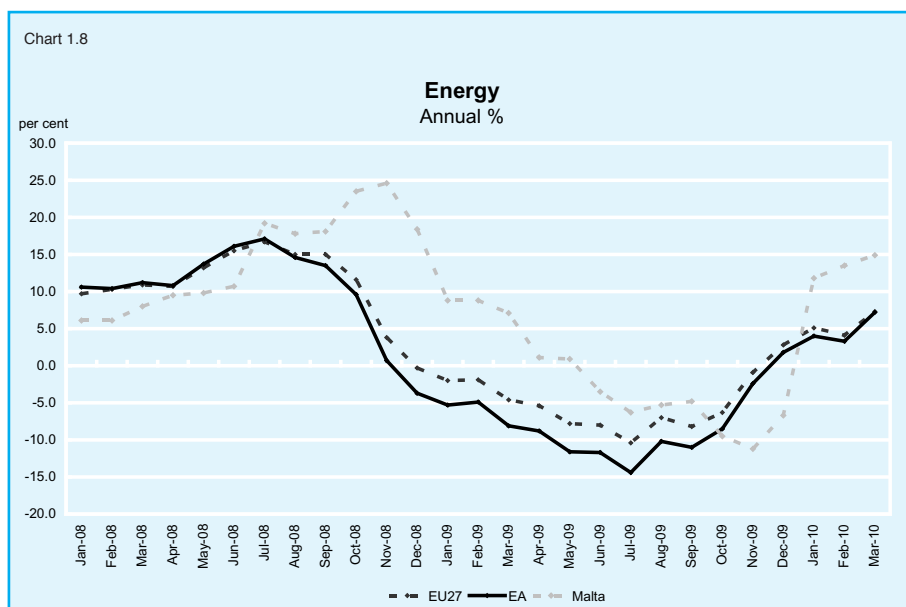


Chart 1.9

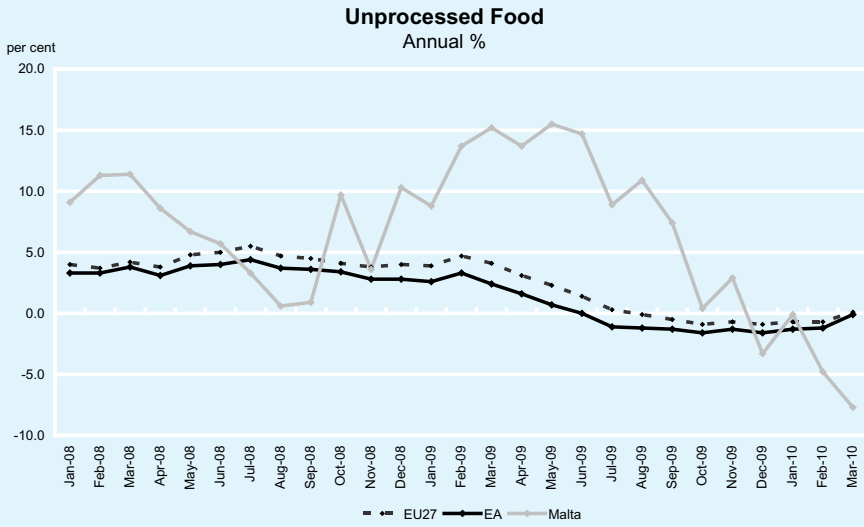


Chart 1.10

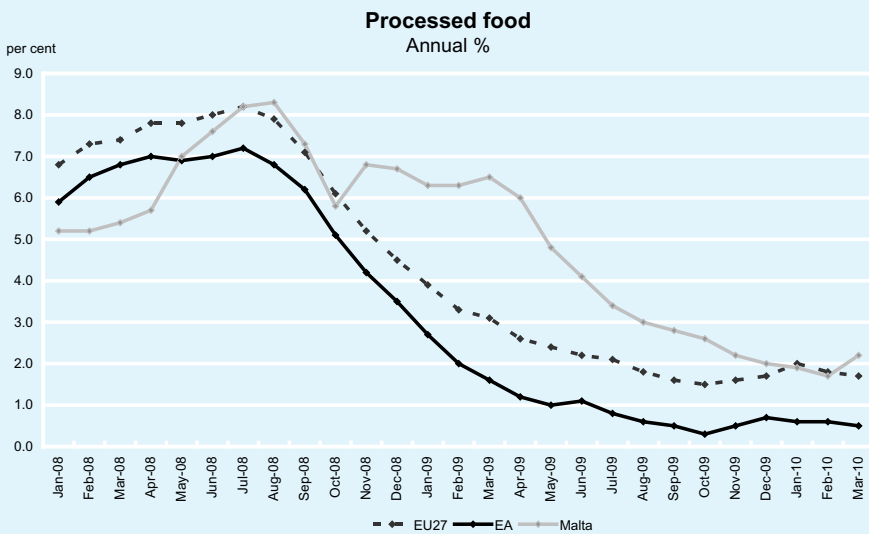


Chart 1.11

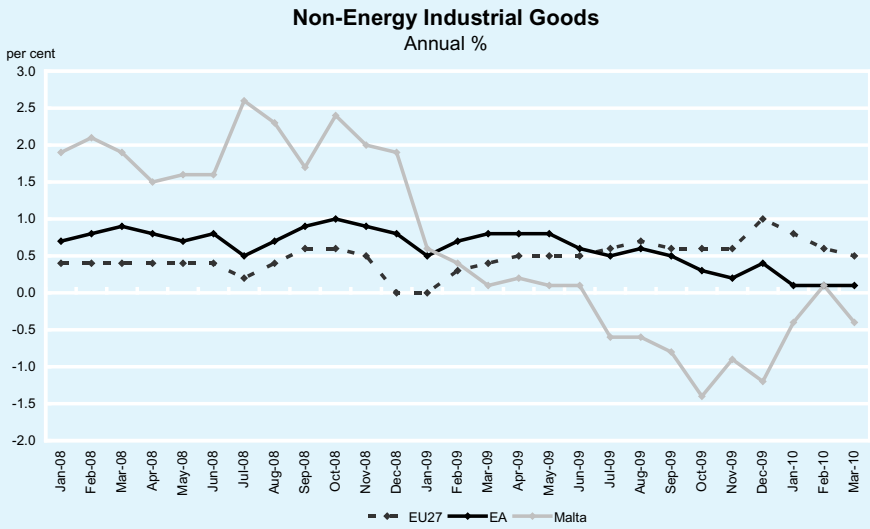
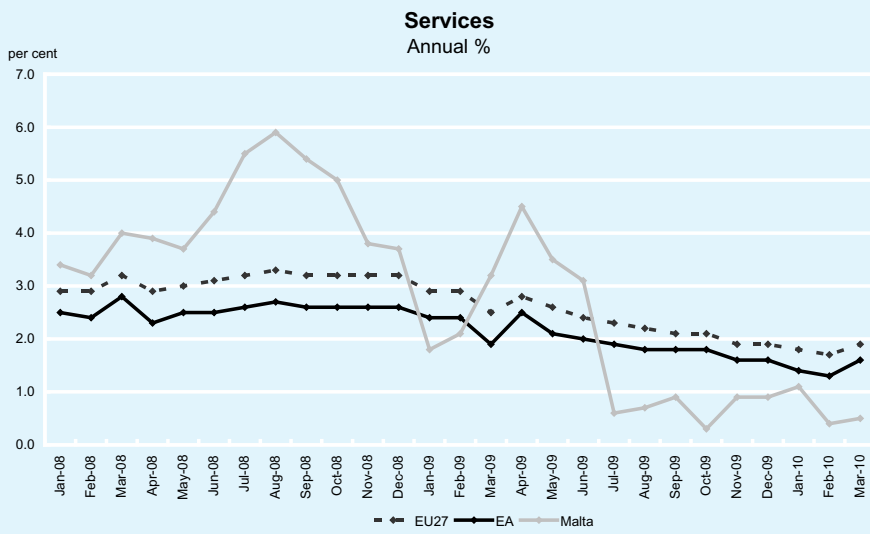


Chart 1.12



During the period under review, in general the inflation rate for unprocessed food in Malta was significantly higher than in the EU and EA average. The gap was significant during most of 2009 and peaked at 14.8 percentage points during May 2009. Over the entire period under review, average inflation stood at 6.6 per cent, 6.0 percentage points higher than in the EA. Although during the second half of 2009 the inflation rate declined it still stood above the comparable EA average. The inflation rate declined below the EA average in February and March 2010.

Similarly, in the case of processed food (including alcohol and tobacco) domestic inflation rate was generally higher than that recorded both in the EU and EA, with a notable differential during the first half of 2009. Over the period January 2008-March 2010, the average inflation rate for this category stood at 5.0 per cent, 1.7 percentage points higher than in the EA. Furthermore, whilst domestic inflation in this category remained persistently high during the first half of 2009, the corresponding indices in the EU and the EA followed a decreasing trend. Over the second half of 2009, the inflation rate for processed food in Malta started to decline, but it still exceeded the EA average by a noteworthy 1.7 percentage points in March 2010.

Over the past twenty-seven months, the inflation rate for non-energy industrial goods prices in Malta was around 0.7 per cent, marginally higher than the rate recorded in the EA. When compared to the EA average, the inflation rate in Malta was higher during the period under review up to February 2009 and remained generally lower since then.

The inflation rate for services for Malta displayed an element of volatility with respect to the EU and Euro Area average. On average, the inflation rate for services stood at 2.8 per cent, 0.6 percentage points higher than in the EA. The inflation rate was significantly higher than the EA average during 2008 and the second quarter of 2009. It has been lower than the EA average since the beginning of the third quarter of 2009.

Concluding, over the period under review the headline inflation rate in Malta was generally higher than the EA average, and especially so in the first half of 2009. Although, since then the gap in the inflation rate in Malta vis-à-vis the EA average has tended to narrow, in March, it was still 0.9 percentage points higher.

Recent trends in inflation taken on the basis of year-on-year changes in inflation indicate an element of stickiness in domestic prices of processed and unprocessed food, as inflation in these items in Malta was significantly higher

than in the EA during the first half of 2009. Inflation in energy products in Malta was also significantly higher, while inflation in industrial goods (excluding energy) and services was generally higher than in EA.

1.2 Developments in Other Prices

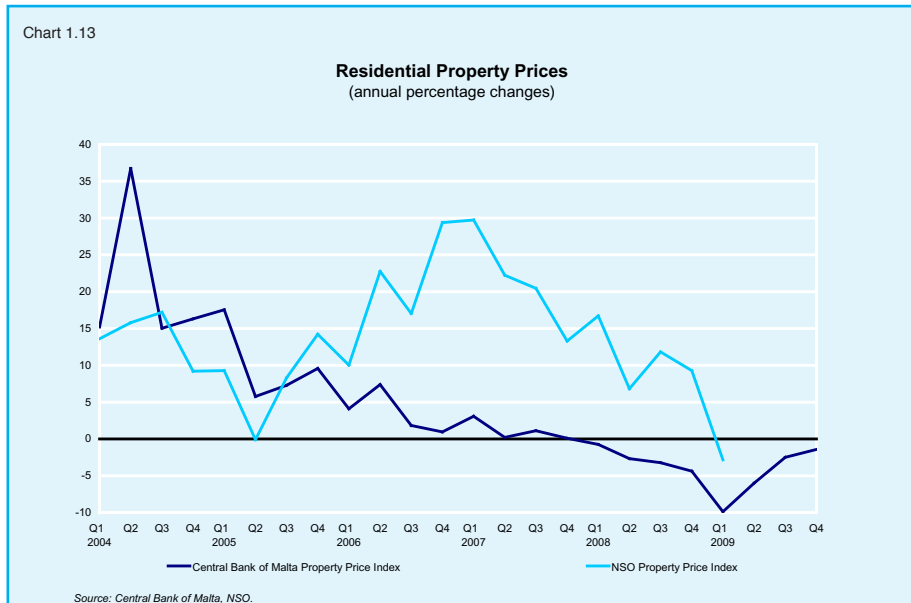
Following the review of the inflationary developments in Malta presented in Section 1.1, this sub-section presents an overview of developments in asset prices, producer prices and import and export prices in view of their importance in the overall price formation process.

1.2.1 Asset Prices

Residential Property Prices

The National Statistics Office (NSO) property price index went up by an average of 7.7 per cent in 2005. Property prices rose more strongly in 2006, with the annual increase peaking at 29.7 per cent in the first quarter of 2007. Despite the subsequent deceleration, prices averaged a substantial growth rate of 11.0 per cent for all of 2008. As shown in Chart 1.13, the latest available data relate to the first quarter of 2009, when prices declined by 2.8 per cent.

According to quarterly data on advertised prices compiled by the Central Bank of Malta, residential property price inflation peaked in 2004, reaching an average of 20.8 per cent for the year. Thereafter, prices continued to rise but



at a slowing pace, with the year-on-year increase easing to 10.1 per cent and 3.6 per cent in 2005 and 2006, respectively. Prices stabilised in 2007, adding around 1 per cent on average. However, they declined throughout 2008 for an average fall over the year of 2.7 per cent. While the Bank's index dropped further in 2009, signs of a stabilisation emerged after the rate of decline rose from a low of -9.9 per cent in the first quarter of the year to -1.4 per cent in the last quarter.

These differing profiles reflect a number of methodological factors, including differences in sources and methods. In recent years, however, both measures indicate a slower rate of growth of property prices, with negative rates being recorded in the most recently available data points.

In theory there could be a limited direct link between house price developments and consumer price inflation as certain HICP components, such as house maintenance costs, could be influenced by property price trends. Indirectly, moreover, rising house prices could also lead to an increase in households' wealth, fuelling consumer demand and giving rise to upward pressures on prices. However, the empirical evidence for Malta covering the period surveyed suggests that there is no clear relationship between developments in residential property prices and consumer price inflation.

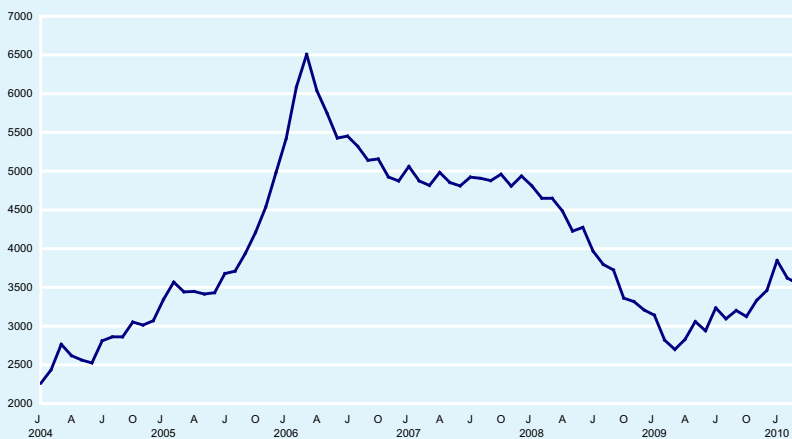
Equity Prices

The Malta Stock Exchange (MSE) share index peaked at 6,508.66 in March 2006, for a gain of 187.6 per cent from 2,262.95 in January 2004, which is the start of the observation period. The spike in stock prices and trading volumes during 2006 was driven by positive financial results posted at the end of the previous year by the major listed companies. Subsequently, the index declined persistently, particularly throughout 2008, bottoming out at 2,698.37 points in March 2009, for a peak-to-trough decline of 58.5 per cent.

As equity prices slowly recovered, the MSE share index moved upwards during the last three quarters of 2009, gaining almost 8 per cent over the year as a whole. This recovery may reflect a return of risk appetite among investors in a low interest rate environment. Although equity prices rose further in January 2010, a slight dip was registered during the following three months. By the end of April 2010, the index stood at 3,505.93, 1.3 per cent above the level at the end of 2009. However, as show in Chart 1.14, this still corresponds to just over half of the March 2006 peak mentioned earlier.

Chart 1.14

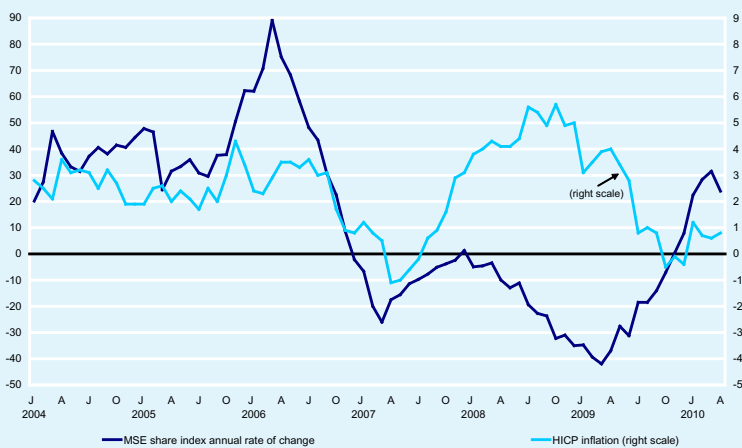
Malta Stock Exchange Share Index
(end of month)



Source: MSE.

Chart 1.15

MSE Share Index and HICP
(annual percentage rate of change)



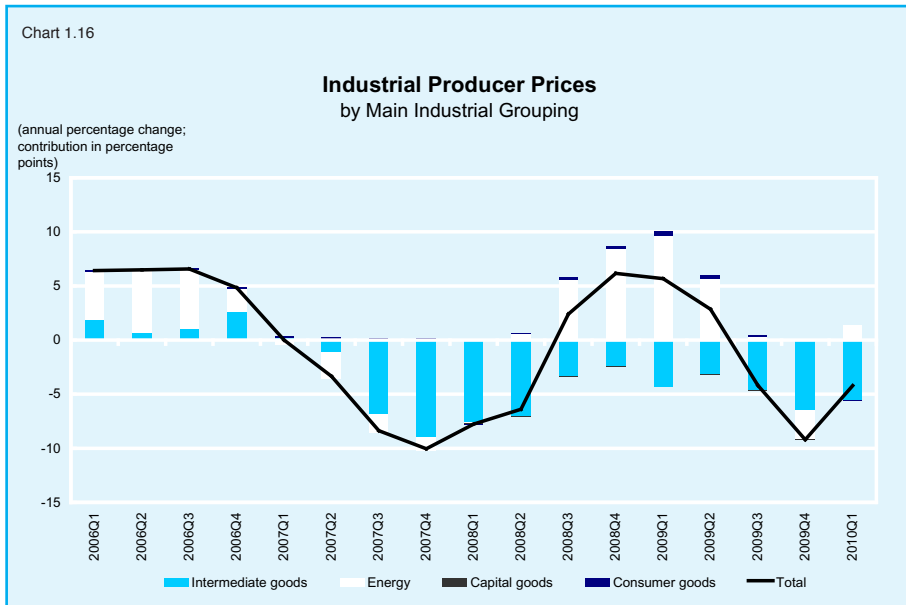
Source: MSE, Eurostat.

As can be seen from Chart 1.15, there appears to be a positive relationship between the HICP inflation rate and the annual rate of change in the MSE share index during parts of the period reviewed. However, from 2008, there appears to be a decoupling in the two variables. Nevertheless, over the period as a whole, there is no evidence of a robust, contemporaneous relationship between the two variables. This suggests that equity-related wealth effects on consumer demand and, hence, inflation in Malta are negligible.

1.2.2 Industrial Producer Prices

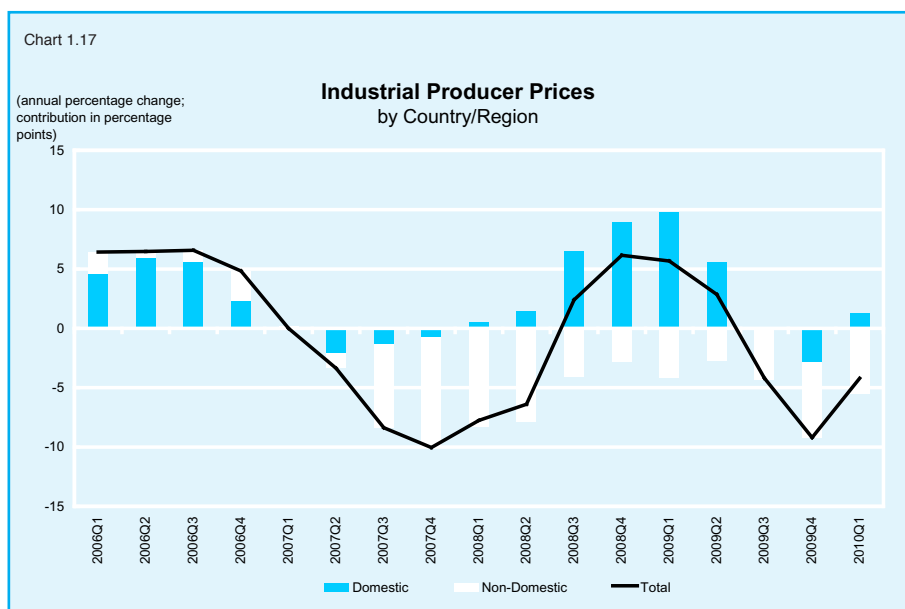
Since 2006, the Producer Price Index (PPI), measuring the gross monthly change in the selling prices received by domestic producers for their output, portrayed a somewhat volatile trend. Following an average annual increase of around 6 per cent in 2006, the PPI followed a steadily decreasing trend throughout 2007, recording an average annual decline of around 9 per cent during the last quarter of that year. This was largely offset by an upward trend sustained throughout 2008, before declining again in 2009. During the latter quarters of 2009 growth in the PPI was negative. However, the trend has been reversed during the first months of 2010. In fact, Chart 1.16 shows that the decline in industrial producer prices slowed down to 4.1 per cent in the last quarter of 2010 compared to an average 8.8 per cent during the last quarter of 2009.

To a large extent, the noted developments reflect significant reductions in the annual inflation of producer prices for intermediate goods. This grouping has



contributed negatively to the overall index since the second quarter of 2007, with a negative contribution of 6.5 percentage points during the last quarter of 2009 and a negative 5.5 percentage points in the first quarter of 2010. The other significant contribution related to energy prices which pushed industrial prices down by an average 2.7 percentage points in the last three months of 2009. However, energy prices were the main contributor for the reversal of the trend in the first quarter of 2010. In fact, during that month, energy prices mitigated the deflationary pressure exerted by intermediate goods by around 1.4 percentage points. Meanwhile, both consumer and capital goods have had relatively negligible impacts on the aggregate PPI, reflecting marginal changes in their prices.

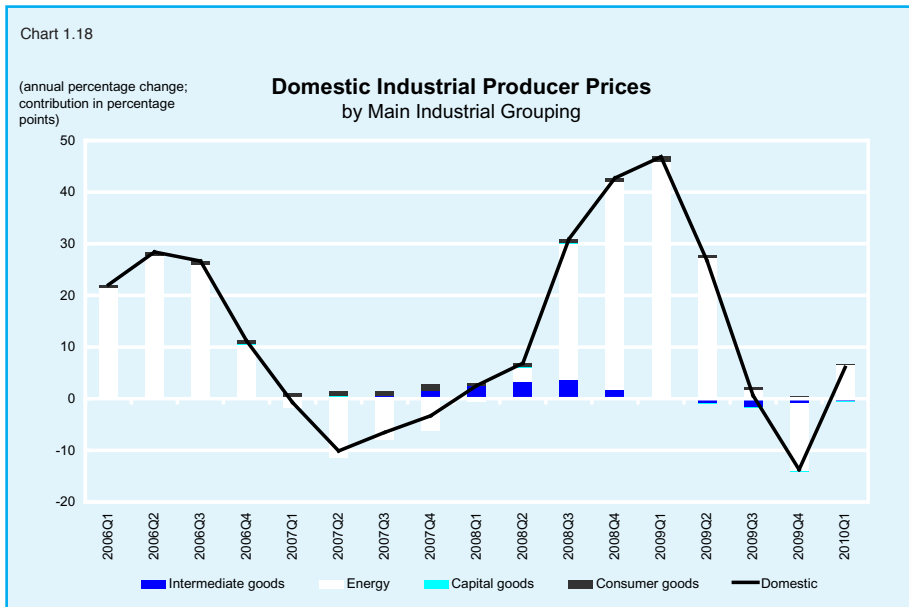
Overall, these developments are indicative of lower producers' inflation which according to economic theory would eventually flow through to consumer prices. Nonetheless, a significant divergence is noted between developments in the PPI and the HICP (see Part I). Mainly, three reasons exist to explain these differences. First is the fact that the PPI targets the output of domestic producers and therefore excludes developments in the prices of consumer imports. Second is the exclusion of excise taxes from the PPI. Both these variables are taken into consideration in the HICP. Thirdly, a substantial proportion of domestically produced goods is directly exported abroad and therefore has no impact on prices faced by domestic consumers. This point is in fact reflected in Chart 1.17 showing diverging trends in domestic and non-domestic producer prices.



Domestic producer prices measure the average selling price of locally-produced goods sold on the domestic market. On the other hand, the non-domestic producer prices reflect developments in the selling prices of goods resulting from domestic economic activity but sold outside the domestic market. While the domestic sector was the major contributor to developments in the PPI prior to 2007, the non-domestic sector was the driver of changes in the PPI throughout 2007 and the first half of 2008. Since the third quarter of 2008, both the domestic and non-domestic sectors have generally contributed to developments in the PPI. A major distinguishing factor is that the non-domestic sector has been consistently showing a negative contribution since 2007.

In fact, during the fourth quarter of 2009, around 6.3 percentage points of the decline noted in industrial prices was attributed to the non-domestic sector while the remaining 2.9 percentage points was accounted for by the domestic sector. Both deflationary developments were somewhat reduced in the first quarter of 2010 as the contribution of the non-domestic price index to the decline in the total producer price index fell to 5.5 percentage points while that of the domestic price index turned positive to 1.3 percentage points.

At a more disaggregated level, Chart 1.18 shows that in recent years the main drivers of the developments observed in the domestic PPI have been energy prices. In fact, the energy grouping has contributed a negative 13 percentage points to the domestic PPI during the last quarter of 2009, turning to a positive contribution of 6.5 percentage points during the first quarter of 2010, reflecting

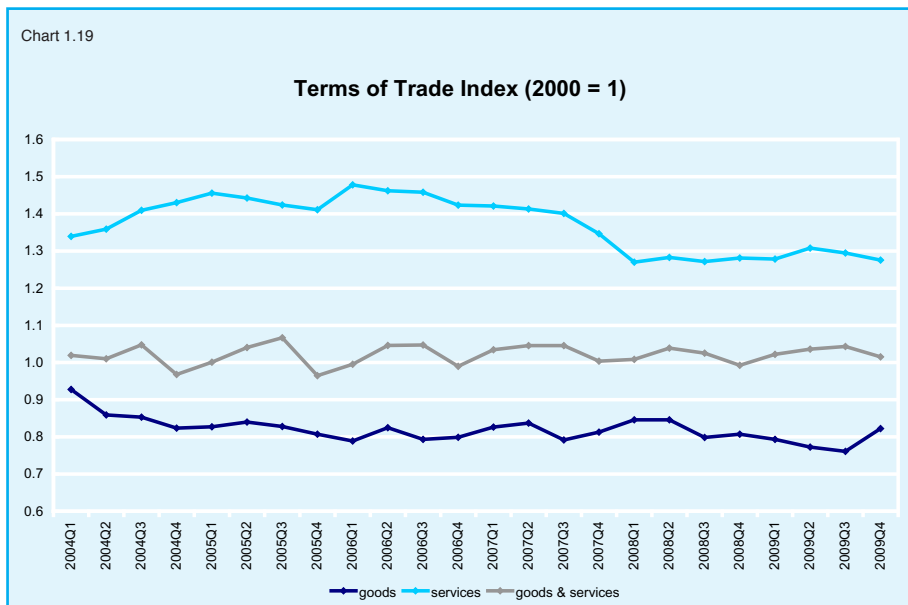


changes in the tariff structure in October 2008, March 2009 and January 2010. Meanwhile, price developments for intermediate goods have contributed a negative average of 1 percentage point during the last quarter of 2009, and a further negative 0.5 percentage points contribution during the first quarter of 2010. Other industrial groupings have had a negligible impact on the trend followed by the domestic producer price index reflecting relatively unchanged producer prices.

Overall, it can be concluded that the deflationary pressures noted in the overall producer price index are mainly a reflection of prices received by domestic producers for their exported output. The significant declines noted throughout the last quarter of 2009 and the first quarter of 2010 follow the lower global demand for intermediate goods and consequent competitiveness pressures. However, at the same time, it is noted that energy prices have had a significant impact on the trend followed by the annual percentage changes in the producer price index, as the reversal of the downward trend observed in first quarter of 2010 coincided with the revision in energy tariffs.

1.2.3 Terms of Trade

The terms of trade measures the volume of imports that can be bought with one unit of exports, and hence is indicative of a country’s purchasing power. Chart 1.19 shows that the terms of trade for goods generally followed a downward trend until the end of 2006. The index remained relatively stable during 2007



and until the first half of 2008, but generally resumed its downward trend thereafter. In the case of services, the terms of trade followed a gradual upward trend, peaking in the first quarter of 2006. Between 2006 and the first quarter of 2008, the terms of trade for services deteriorated, but remained relatively stable thereafter, rising temporarily in the second of 2009.

Since 2000, the overall terms of trade hovered around 1, indicating that changes in overall export prices moved practically in line with developments in import prices. Although merchandise import prices grew at a faster rate than prices of exports of goods, in the case of services, export prices have outpaced the rise in import prices, thus offsetting the negative terms of trade in goods.

The income terms of trade, measured as the volume of exports multiplied by the ratio of export to import prices (equivalent to nominal exports divided by the import price index), shows similar trends.⁵ Chart 1.20 displays the year-on-year growth in income terms of trade and shows that since the first quarter of 2008 it has been declining, falling by 12 per cent in first quarter of 2009. However, after the first quarter, income terms of trade improved, though they still remained negative during the second quarter, but turned positive in the third and fourth quarters of 2009, up by 3.1 per cent and 2.4 per cent respectively.

The annual average index for both the terms of trade and the income terms of trade are presented in Charts 1.21 and 1.22. These show that the income terms of trade from services has increased significantly, especially after 2005,

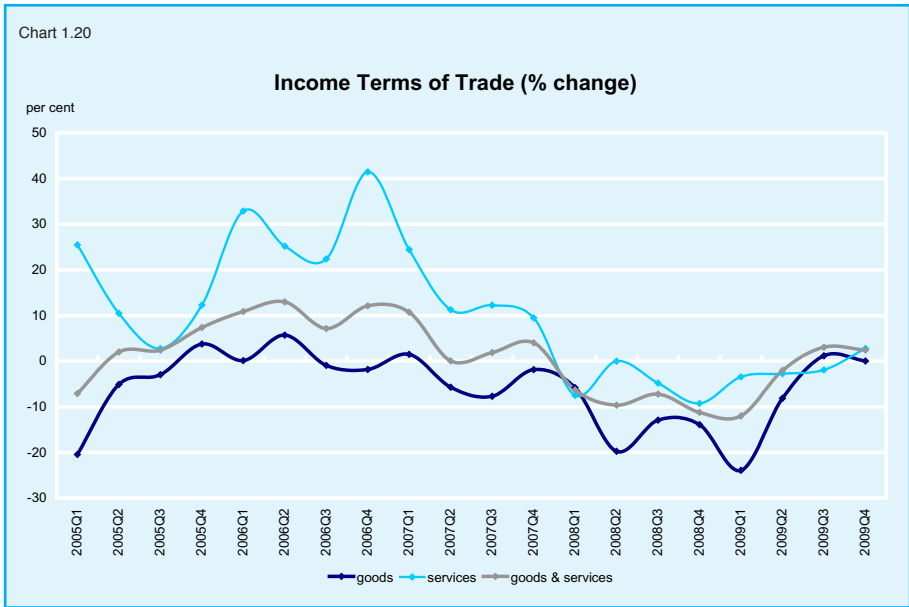


Chart 1.21

Terms of Trade Index (2000 = 1)

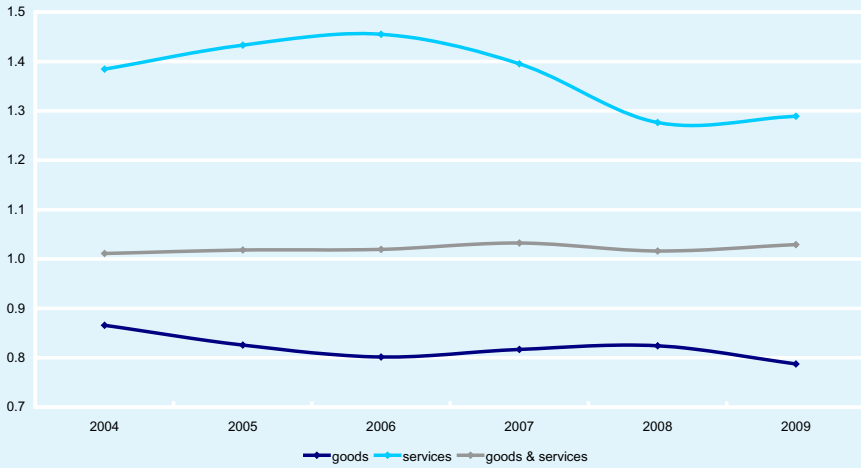
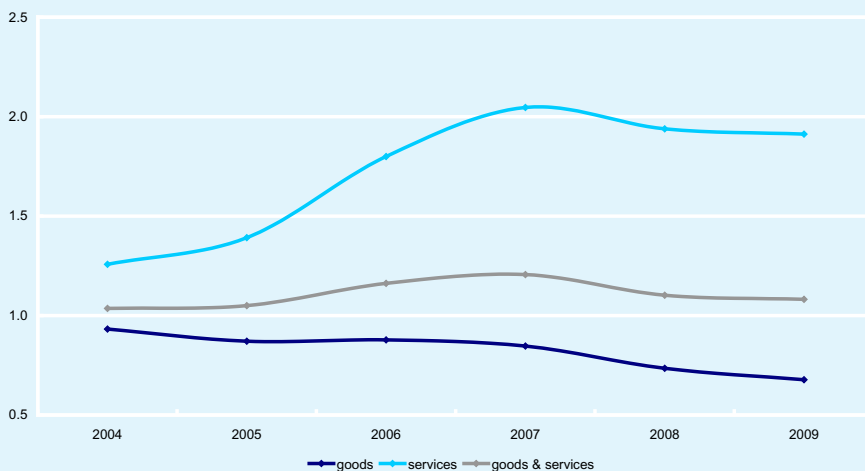


Chart 1.22

Income Terms of Trade Index (2000 = 1)



reflecting the emergence of new sectors such as on-line gaming, while that for goods has been in decline after 2003, indicating that export revenues from manufacturing were able to purchase a smaller basket of imported goods. The overall income terms of trade shows an increase of about 10.7 per cent between 2004 and 2009, implying that the purchasing power of Malta's export earnings in terms of imported goods and services increased on average by around 0.6 per cent per annum.

As regards trade in goods, the worsening in the terms of trade over recent years, coupled by a worsening in the income terms of trade, suggests a deterioration in competitiveness in manufacturing. By contrast, despite the improvement in the terms of trade in services, which could suggest a decline in relative price competitiveness, income terms of trade for services still continued to improve, suggesting that Malta still enjoys a comparative advantage in services, especially in certain niche sectors as financial services and on-line gaming. Overall, one could conclude that the shifts in activity towards services in recent years helped the Maltese economy to compensate for losses in comparative advantage in manufacturing as gains were recorded in the overall income terms of trade, that were even slightly stronger than the overall, albeit small, rise in the terms of trade.

Footnotes:

¹ The twelve-month moving average measure of inflation represents the average annual inflation rate over a period of twelve months. By definition, such measure incorporates information on inflation on the basis of developments over the past twelve months and tends to be smoother than the annual rate of inflation.

² The annual rate of inflation gives a better indication of recent developments and emerging trends.

³ The estimate of Core Inflation excludes the Food, Beverages and Tobacco, Water, Electricity, Gas and Fuels, Transport & Communications and Clothing & Footwear sub-indices on basis of their volatility.

⁴ For comparability purposes the analysis in this sub-section is based on the Harmonised Index of Consumer Prices (HICP), an index calculated according to rules specified in a series of European Union Regulations that were developed by the EU statistical office - Eurostat - in conjunction with the EU Member States.

⁵ The income terms of trade measures the volume of imports that can be purchased by export revenues.

2. Macroeconomic Analysis of Inflation Developments

2. Macroeconomic Analysis of Inflation Developments

This section analyses macroeconomic developments in the Maltese economy in view of the influence of the role of demand, supply pressures and credit in affecting inflation over the short to medium term as well as by the relative elasticity of wages, prices and interest rates. In addition this section will look into developments in variables associated with the costs of production, in view of the importance of the latter in affecting inflation.

According to standard economic theory, inflation in the short term can be caused by three main factors:

1. Excess demand pressures occurring when the economy is growing in excess of its potential causing the economy to overheat with rising inflationary pressures;
2. Supply side shocks such as a rise in international oil prices or an exchange rate depreciation which causes an overall increase in costs of production and therefore the general price level and inflation;
3. Expectations driven inflation occurring when economic agents expect future prices and inflation to exceed current inflation, causing inflation to rise immediately in the current period (self-fulfilling expectations).

In addition, from a longer-term perspective, inflation may also be affected by monetary developments. Specifically the long-run rate of increase in prices tends to equal the difference between the long-run growth rates of money supply and real output. However, in view of the focus of this report on short term inflationary developments, this section will be focusing on issues related to the state of demand and supply.

2.1 The Impact of Demand and Supply Factors

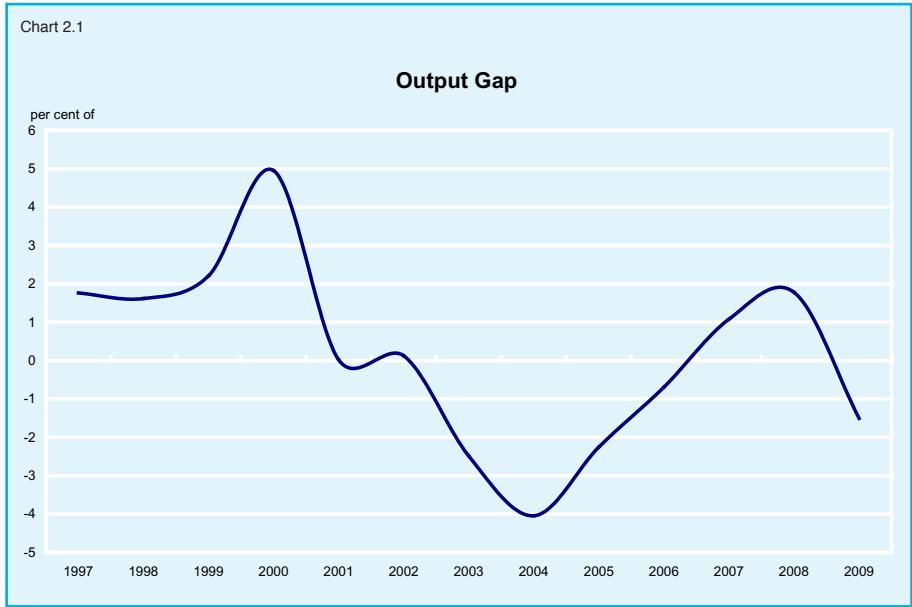
2.1.1 Inflation and Demand Conditions

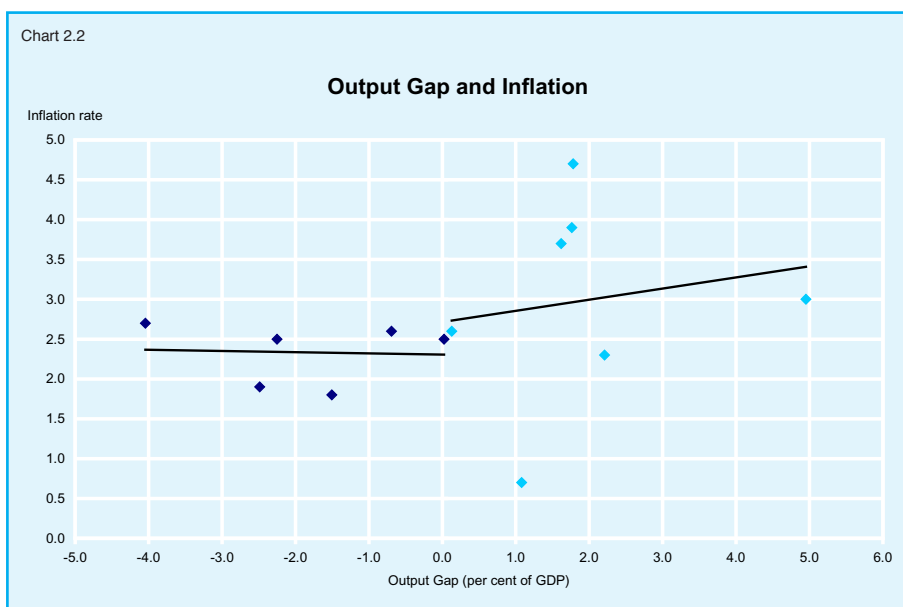
When the demand for an economy's output is exceeding its potential supply it becomes difficult for firms to maintain stable prices. In the presence of structural constraints in the labour market, this is also likely to cause an excess demand for labour resources with upward pressures on wages. This excess demand is likely to gradually result in rising inflation.

It is difficult to establish exactly when the economy is growing in excess of its potential. Typically this phenomenon is observed when the growth in GDP is no longer associated with stable inflation. Also, unemployment will tend to be below its natural rate causing wages to rise in excess of output growth. This in effect will also give rise to inflationary pressures. To measure excess demand pressures economists typically use the concept of the output gap. This measures how much actual GDP exceeds or otherwise a notional estimated measure of potential GDP.¹ A positive output gap is typically associated with excess demand pressures driving prices and inflation upwards, other things (supply side shocks and expectations) remaining equal. A negative output gap is associated with deficient demand for an economy's output often resulting in lower prices and lower inflationary pressures, or possibly even deflation.

In 2009, the output produced was below the potential level, as shown in Chart 2.1. Whilst in the last quarter of 2009 the economy started to recover, GDP was still below its potential level. Overall, demand pressures should be pulling inflation downwards, other things remaining equal.

A positive relationship between the output gap and the rate of inflation appears to be present as illustrated in Chart 2.2. This is in line with what we expect in economic theory. It is noteworthy that the relationship is not symmetrical indicating more downward rigidities in inflation when the output gap is negative and more upward flexibility in inflation when the output gap is positive. This





asymmetry in overall price changes in the economy is worth investigating further since it could be a symptom of market imperfections in the economy.

During 2009, the economy was going through a recession with a negative output gap, which is often conducive of declining inflationary pressures. However, one should not discount the possibility that over the short term different components of aggregate demand do not move in tandem with each other. This may create different rates of growth in prices associated with the different demand components. Following is an analysis of selected components of aggregate demand which are deemed relevant for current developments in inflation. However, before this analysis, credit developments are reviewed, as these can be a relevant factor explaining the performance of specific demand components.

2.1.2 Credit Developments

Growth in domestic credit is a key source of money creation. Credit growth can also support aggregate demand and, in this way, exert upward pressure on prices.

Despite recording double-digit growth rates for most of 2009, credit to residents of Malta slowed down persistently throughout the year, with its annual rate of growth moderating from a peak of 12.1 per cent in March to a still substantial rate of 9.0 per cent in December. Table 2.1 highlights these developments. The

overall slowdown mirrored developments in credit to other residents, while growth in credit to general government was volatile. Data up till March 2010 revealed a pick-up as credit to both categories accelerated, with growth in total credit reaching 9.9 per cent.

Turning to the major components of credit to residents, year-on-year growth in credit to general government slowed down during the December quarter as credit institutions' holdings of Treasury bills and Malta Government Stocks (MGS) declined as shown in Chart 2.3. However, as resident banks' MGS portfolios rose during the first quarter of 2010, the annual rate of growth of credit to general government accelerated to 19.2 per cent.

At the same time, growth in credit to other residents – which includes households, private and public non-financial corporations and non-bank financial institutions – also picked up during the first quarter of 2010, rising from 7.4 per cent in December 2009 to 7.8 per cent in March 2010. Loans, which account for almost all such credit, accelerated from 7.5 per cent to 7.8 per cent during the same period. These developments are shown in Table 2.2. Growth stemmed mainly from credit to the non-bank private sector, which, in absolute terms, makes up more than 90.0 per cent of credit to other residents. In contrast, credit to public non-financial corporations decelerated substantially during the period.

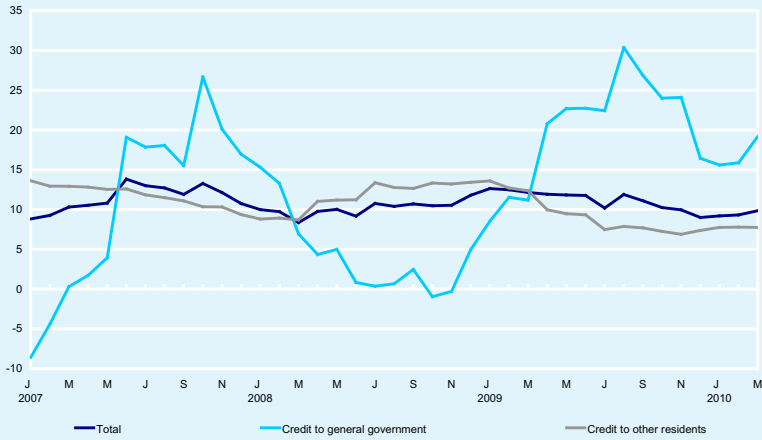
Over the twelve months to March 2010, growth in lending to the private sector was once again driven mainly by mortgages, which, despite a marginal slowdown, continued to expand steadily and accounted for almost half of the annual expansion in private sector borrowing. Chart 2.4 illustrates annual private sector loan growth. Lending to the transport, storage & communications sector and to the construction sector also picked up, with the respective growth rates accelerating to 13.4 per cent and 2.1 per cent in March. In contrast, credit to two

Credit to Residents					
Table 2.1	annual percentage changes				
		2009			2010
	Mar	Jun	Sep	Dec	Mar
Total Credit	12.1	11.8	11.1	9.0	9.9
Credit to general government	11.2	22.7	26.9	16.4	19.2
Credit to other residents	12.4	9.3	7.7	7.4	7.8

Source: Central Bank of Malta.

Chart 2.3

Credit to Residents
(annual percentage changes)



Source: Central Bank of Malta.

Credit to Other Residents ^(a)

Table 2.2

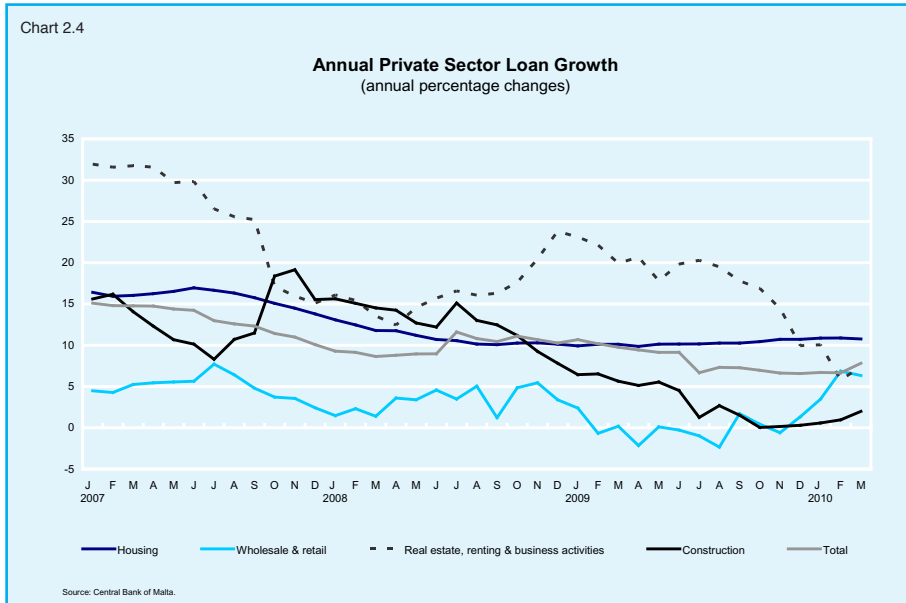
	annual percentage changes				
	2009			2010	
	Mar	Jun	Sep	Dec	Mar
Total Credit	12.4	9.3	7.7	7.4	7.8
Credit to the non-bank private sector	9.9	9.1	7.3	6.8	7.9
Credit to the non-bank public sector	52.7	12.0	12.9	13.8	5.8
Total Loans	12.2	9.3	7.8	7.5	7.8
Electricity, gas & water supply	101.5	20.4	27.0	29.7	15.0
Transport, storage & communication	26.9	21.2	2.4	11.8	13.4
Agriculture & fishing	18.8	22.5	35.3	44.2	41.2
Manufacturing	-5.8	-11.7	-11.0	-13.0	1.2
Construction	5.6	5.4	1.5	0.3	2.1
Hotels & restaurants	0.8	2.6	3.9	6.2	5.4
Wholesale & retail trade; repairs	0.2	-0.3	1.7	1.3	6.3
Real estate, renting & business activities	22.7	21.6	18.7	10.9	8.0
Households & individuals	10.9	10.6	10.0	9.8	9.6
Other ^(b)	2.1	3.6	-6.4	-8.0	-7.0

^(a) Credit to other residents consists mainly of loans and holdings of securities, including equities, issued by the non-bank private sector and public non-financial companies, and financial derivatives. Interbank claims are excluded. Data only include

^(b) Includes mining and quarrying, public administration, education, health and social work, community recreation and personal activities, extra-territorial organisations and bodies and non-bank financial institutions.

Source: Central Bank of Malta.

Chart 2.4



other important categories, namely, the real estate, renting & business activities sector and the hotels & restaurants sector expanded at a slower annual rate.

Meanwhile, credit to the non-financial public corporations slowed down substantially, growing by 5.8 per cent during the twelve months to March as opposed to 13.8 per cent three months earlier. Growth in this sub-sector was mainly driven by higher lending to the electricity, gas & water supply sector, though it slowed down sharply on a year earlier.

In absolute terms, bank lending to the private sector continues to be dominated by loans to households, which alone accounted for around two-fifths of the total at the end of March 2010. In turn, loans to households consisted mainly of mortgages, which made up around 78.0 per cent of the total, while consumer credit contributed to another 12.0 per cent, with ‘other’ lending to households accounting for the remainder. In levels consumer credit amounted to €373.8 million in December 2009, after having increased by €43.9 million, or 13.3 per cent during the year. The flow of consumer credit during the year, expressed as a proportion of private consumption in 2009, was extremely small (around 1 per cent). This indicates that lending by banks directly to finance household consumption is of limited importance as a determinant of consumer demand.

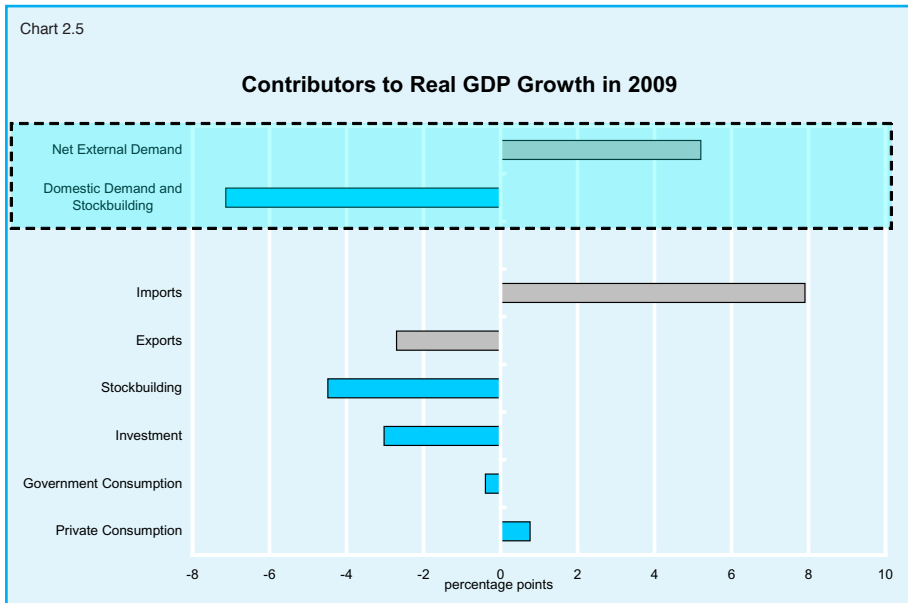
2.1.3 Real GDP Growth²

Following a period of rapid growth averaging 3.8 per cent from 2005 to 2007 the economy eventually slowed down, until a decrease in real demand of 1.9 per cent was recorded in 2009. Implied inflation from the national accounts deflators hovered around 3.0 per cent in 2005-2007, and decreased to 2.2 per cent in the subsequent two years. This is consistent with the weakness in aggregate demand in the Maltese economy experienced during the recession of 2009. Chart 2.5 plots the contributors to real demand growth in 2009, and details of real GDP components can be seen in Table 2.3.

2.1.4 Consumption

The main factor contributing to this performance in real demand was the decline in investment and export activity in 2008 and 2009. Real private final consumption expenditure over the period under study was more resilient. The overall resilience of private consumption expenditure in the 2009 recession contrasts with developments in other demand components. It is nevertheless worth noting that the apparent resilience of private household consumption expenditure was mainly due to an increase in expenditure on transport. This category includes purchase of new vehicles, costs related to transport operations and transport services.

Credit availability can be an important factor underlying the resilience of consumption patterns during a recession. Nevertheless, the section on credit



	annual percentage changes							
	2008				2009			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Final Consumption	6.3	8.3	9.3	3.4	1.2	-0.4	0.2	0.8
Private Final Consumption ^(a)	3.8	6.5	7.0	2.8	1.1	-0.5	1.0	3.0
Government Consumption	14.8	14.6	17.7	5.4	1.4	0.0	-2.4	-6.4
Gross Capital Formation	5.7	-0.4	-31.6	-46.4	-38.4	-62.8	-39.8	-10.5
Gross Fixed Capital Formation	-11.8	-10.1	-23.3	-37.9	-29.2	-29.8	7.6	-20.5
Changes in inventories ^(b)	3.9	1.9	-1.0	-1.9	-3.3	-11.1	-5.4	1.8
Acquisitions less disposals of valuables ^(b)	-0.2	0.0	-0.2	-0.3	0.2	-0.1	0.0	-0.1
Exports of Goods and Services	-3.9	-9.1	-5.4	-10.2	-13.1	-1.8	1.3	0.1
Imports of Goods and Services	0.5	-4.6	-5.8	-17.7	-17.6	-14.8	-0.9	-1.2
GDP	2.4	2.8	2.6	0.7	-2.0	-3.9	-2.4	0.5

^(a) Includes NPISH Final Consumption
^(b) Percentage point contributions to growth of Real GDP

Source: NSO

growth does not suggest that credit growth was a major determinant of the consumption growth in the Maltese economy during 2009.

Turning to more recent quarterly developments, a recovery in aggregate demand conditions of 0.5 per cent was evident in the fourth quarter of 2009. The recovery was mainly related to net external demand which contributed 1.1 percentage points towards growth. On the other hand domestic demand conditions contributed a negative 0.6 percentage points mainly due to a continued drop in investment activity and lower government consumption. The pick-up in private final consumption growth in the fourth quarter of 2009 is noteworthy.

2.1.5 Investment³

The investment component is important for both the expenditure side and the production side of the economy. In the short run, changes in investment as an expenditure component, affect directly the output produced in the economy. Since most investment goods in Malta are imported, domestic demand pressures are not a factor influencing the international price of investment goods. However, domestic demand conditions could potentially exert pressures on prices of investment goods in cases where there are domestic intermediaries in the value chain.

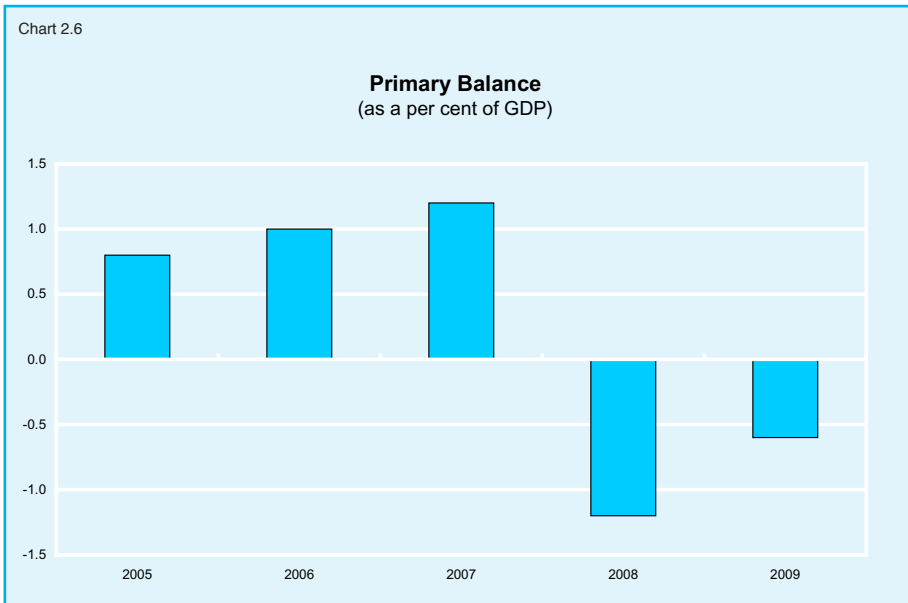
The drop in investment, especially in housing since the second quarter of 2008 and construction for most of the period from 2007 to 2009, is likely to exert downward pressures on prices of construction goods and services and on property prices. The property market is analysed separately in another section

of this report, with indications of decreasing residential property prices from 2008 according to the Central Bank of Malta Property Price Index.

Investment activity is also an important input in the production process and thus an important component determining aggregate supply in the economy. The drop in investment activity (particularly that related to investment in new equipment, commercial property and infrastructure) implies that the productive capacity of the Maltese economy may have been reduced. Indeed, private sector firms have been scaling back their investment projects from the third quarter of 2008 onwards primarily as a response to the worsening economic prospects. It is important to ensure a reversal of this trend so that a likely recovery in demand does not result in supply bottlenecks and any potential build-up of inflationary pressures.

2.1.6 Government Spending and the Fiscal Stance

Following a period of sustained growth in real government consumption expenditure in 2008, growth slowed down considerably, with a decrease of 6.4 per cent registered during the final quarter of 2009. The budget deficit decreased from 4.5 per cent of GDP in 2008 to 3.8 per cent in 2009. Exceptional expenditure outlays towards the shipyards and utilities sector partly explain the higher budget deficit ratio in 2008. Chart 2.6 presents a better measure of the fiscal stance given by the primary balance which is the government balance net of interest expenditure. It is worth noting that a deficit was registered in 2008



and 2009 suggesting that fiscal policy was supportive of the economy. However, the decline in the primary balance in 2009 from -1.2 per cent of GDP to -0.6 per cent of GDP indicates a slightly less expansionary fiscal stance.

2.1.7 The International Economy and Export Performance

External demand conditions can have an important effect on domestic prices, particularly producer and export prices. In view of the significant openness of the Maltese economy and the competitive pressures Maltese firms have to face in international markets, foreign demand conditions can have an important effect on producer and export prices. Indirectly, export performance also affects domestic income and thereby influences domestic demand. Therefore, there is also an indirect effect on prices charged by domestic firms catering for the domestic market. In this respect monitoring international developments is important when analysing inflationary pressures.

During 2009 the world economy has experienced the worst contraction since the 1930s and economic growth among Malta's main trading partners was negative. This resulted in a significant contraction in foreign demand for Maltese exports. Indeed in 2009, exports of goods and services declined by 3.1 per cent.

Signs of economic recovery in world trade appeared in the second half of 2009. The world economy continued to recover towards the end of 2009. The JPMorgan Global All-Industry Output Index suggests that growth resumed in the third quarter of 2009, and continued in the subsequent quarter. But many countries have experienced sharp falls in output so that their GDP remains well below pre-crisis levels. This subsection considers recent developments in Malta's main trading partners.

2.1.7.1 Recent Economic Developments in Malta's main Trading Partners

Although signs of recovery among Malta's trading partners started to emerge in the third quarter of 2009, data for the fourth quarter of 2009 proved to be weaker than expected. This was indicative of the fragility of the economic recovery evident up till the end of 2009.

Focusing more on domestic demand conditions in Malta's trading partners, Table 2.4 shows the growth in private consumption, investment and inventories, which is a better measure of the potential demand for Maltese exports. Domestic demand conditions in the major trading partners (except Germany) appeared to

	Averages	2009				percentage changes on the previous quarter
	2007-2008	Q1	Q2	Q3	Q4	
EU-27	0.2	-2.5	-0.8	0.4	0.0	
Euro Area	0.2	-2.3	-0.8	0.4	-0.2	
Germany	0.4	-1.2	-1.4	1.4	-2.1	
France	0.2	-1.2	-0.5	-0.1	1.4	
Italy	-0.3	-2.4	-0.5	0.3	0.5	
UK	-0.1	-2.4	-1.0	-0.1	0.8	

recover somewhat in the fourth quarter of 2009. However, these developments need to be interpreted with due caution as they portray growth starting from a low base due to the negative effects of the crisis. Furthermore, the positive growth outlook is subject to a number of downside risks, particularly in view of recent developments in sovereign debt markets.

2.1.8 Conclusion

Whilst some signs of recovery are emerging, aggregate demand conditions remain weak and the economic outlook is subject to a high degree of uncertainty. The Maltese economy continues to perform in a situation of a negative output gap suggesting that demand pressures on inflation remain low and are expected to remain subdued in the short term.

2.2 Potential Output and Inflation

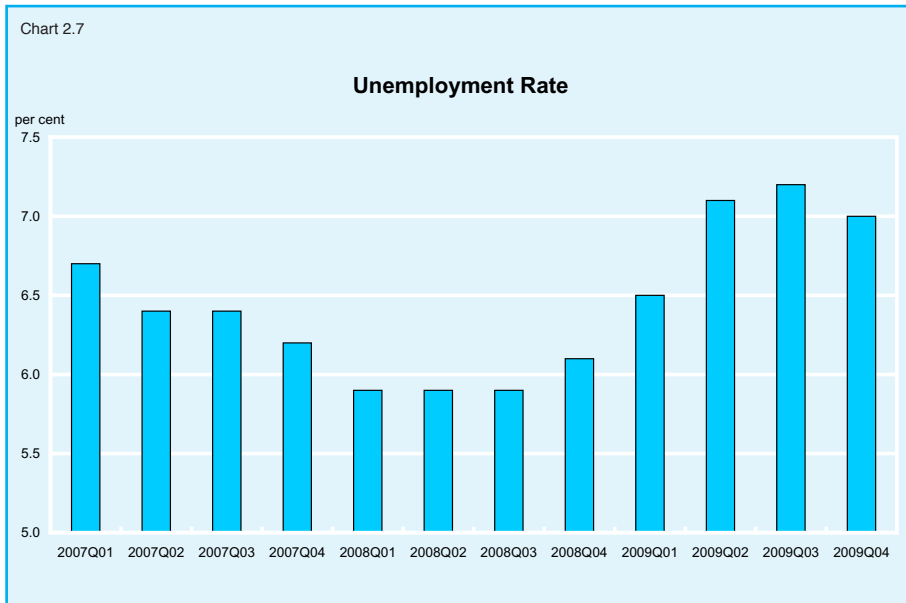
Given that the production process relies on the utilisation of inputs, specifically labour and capital, an analysis of labour market conditions is provided in this section. In addition it is worth highlighting that the drop in investment activity highlighted in the previous section also has negative consequences on potential supply and production and is consistent with a drop in aggregate supply. Together with population and labour supply developments, this could have implications on potential growth of the Maltese economy and inflationary prospects in the medium-to-long term.

2.2.1 Inflation and the Labour Market

Several factors affect the labour supply, among which the evolution in the working age population which is in turn dependant on population growth and its age composition. Individual decisions as to whether to participate in the labour market reflected in the activity rate, is another important factor affecting the labour supply. Labour demand is mainly related to economic growth, as firms seek more workers as higher output is produced.

Unemployment results when the demand for labour by firms proxied by the employed population falls short of the labour supply. Whilst it is virtually impossible to eliminate unemployment completely, economic theory suggests that there exists a natural rate of unemployment associated with stable inflationary pressures. An increase in unemployment beyond its natural rate is often associated with downward pressures on wages and inflation. This often occurs when the economy is in a recessionary period. On the other hand when the economy is overheating (often at high economic growth rates above potential growth), unemployment may be below the natural rate and this is often associated with upward pressures on wages and inflation.

The unemployment rate (on the basis of Labour Force Survey data) reached a low of 5.7 per cent in the second quarter of 2008, increasing thereafter to around 7 per cent in the second, third and fourth quarter of 2009, as illustrated in Chart 2.7. This is indicative of the available spare capacity in the economy

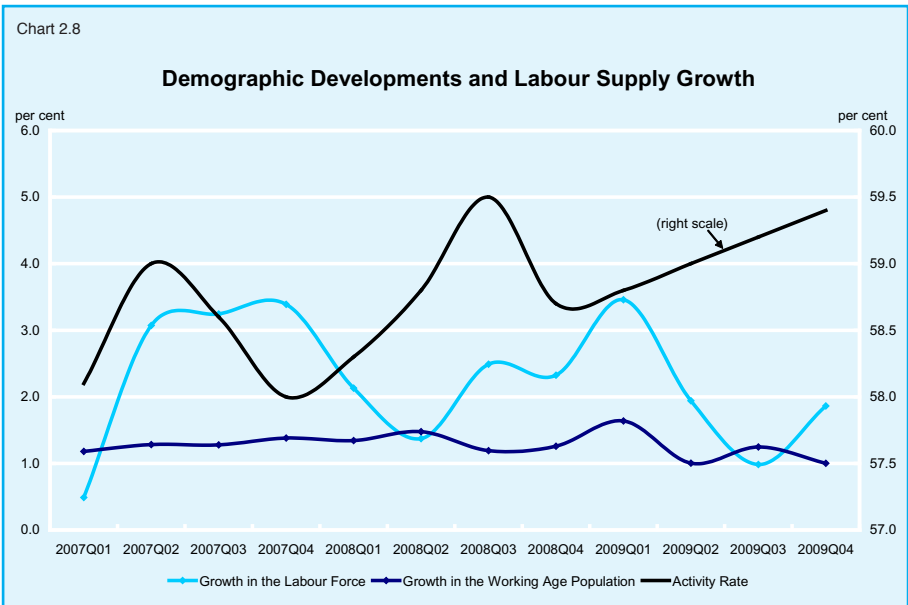


and thus consistent with negative estimates of the output gap. This might point towards an increasing slack in the labour market, which would exert downward pressure on wages and prices.

The slowdown in labour demand as measured by employment growth (during the 2009 recessionary period) started in the third quarter of 2008. Employment decreases were registered throughout most of 2009⁴. On the other hand, despite the recessionary period labour supply as measured by the labour force continued to increase throughout the whole period.

This indicates that the recession has not discouraged workers from seeking employment opportunities, despite the subdued labour demand conditions. In this context it is worth noting that the activity rate was on a general upward trend from 2006, starting from a level of 57.9 per cent to reach 59.2 per cent. This occurred as the labour force increased by 7.8 per cent throughout the period, when compared to the 3.7 per cent increase registered in the working age population. Chart 2.8 highlights these developments.

Female activity was on the rise, reaching 42.0 per cent in the fourth quarter of 2009 but is still low by EU standards. This more than offset a declining male activity rate, which was registered at 76.0 per cent in the fourth quarter of 2009. Ensuring the activity rate increases over time given demographic projections is important, so that labour supply constraints do not become a source of inflation.



Both the increase in labour supply and the decline in labour demand led to the increase in unemployment recorded in 2009. Whilst this could be indicative of weaker wage pressures some important caveats apply. When analysing the relationship between inflation and unemployment it is also important to distinguish between structural and cyclical unemployment. This is important because an increase in unemployment may still be accompanied by upward wage and inflationary pressures if this is accompanied by a rise in structural unemployment.

The structural unemployment refers to those who are looking for employment but do not possess the right skills and abilities required by employers in the labour market. Thus, skill mismatches in certain emerging segments of the labour market may materialise and exert upward pressures on wages and prices even in times of high unemployment. This often occurs during periods of rapid economic restructuring. It is thereby important to improve education to ensure that the labour supply is equipped with the skills demanded by economic operators.

2.2.2 Potential Output Growth

Potential output growth has tended to decrease from 1997 to 2009. Whereas the reduction in potential output growth from 1997 to 2002 was primarily the result of decreases in the contributions provided by capital and total factor productivity, the falling labour contribution from 2002 to 2007 played a central stage in the decrease in potential output growth over that same period. A turnaround in labour contributions in the final two years under study added to the positive contributions provided by total factor productivity, but this was not enough to offset the significant decline in capital contributions as investment responded negatively to the worsening economic environment. This indicates negative repercussions on the productive potential of the Maltese economy.

2.2.3 Conclusion

Spare capacity may be present in the Maltese economy as a result of the fall in aggregate demand. There also appears to be an increasing slack in the labour market which is consistent with subdued wage and inflationary pressures. Nevertheless the decline in investment in the capital stock has affected the productive potential of the economy negatively. Also, despite the rise in unemployment, one has to ensure that skill mismatches do not result in upward pressures on wages in specific emerging sectors.

It must be ensured that the productive potential of the economy is not a constraint and does not contribute to inflationary pressures when demand recovers sufficiently. In this regard, a number of policy issues become important namely: a reversal in the downward trend in investment, increasing the activity rates of males and females to sustain the labour supply especially in view of demographic projections, and ensuring that the labour supply possesses the skills required by the emerging sectors of the economy.

2.3 Costs

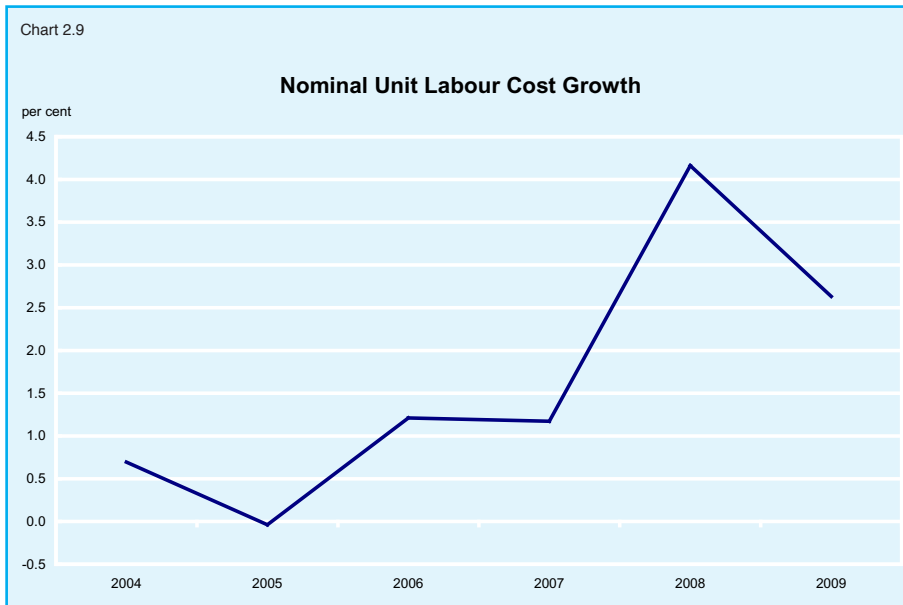
Theoretically, the final price of a domestically produced good or service is the sum of the nominal value of all combination of inputs used in the production process, namely, the cost of purchased raw materials, wages and profits, as well as taxes. Consequently, an increase in the nominal value in any of these variables might be expected to be transmitted to output prices and hence consumer price inflation, all else kept constant. Nonetheless, the extent to which an increase in costs is reflected in consumer prices will depend on the degree of pass-through which in itself depends on the firm's economic activity and its target markets.

This sub-section analyses developments in variables associated with the costs of production, including wage developments and unit labour costs, profit margins and administered prices amongst others. Inflationary developments in Malta's major trading partners as well as developments in international commodity prices are also analysed. The aim is to provide an indication of possible determinants of current or future consumer price developments.

2.3.1 Labour Costs

Labour cost developments are one of the possible causes of cost-push inflation and may have a significant impact on prices of goods produced by those industries which are labour intensive. Simply put, if wage increases exceed productivity increases there is an increased pressure on producer prices to increase. On the other hand, prices may be lowered or held stable in cases where wage growth developments are more than offset by productivity growth.

Chart 2.9 shows that nominal unit labour costs in Malta recorded a growth rate of more than 1 per cent per annum between 2004 and 2007 with the exception of 2005. Since 2008, nominal unit labour costs followed a steady upward trend to stand at 4.2 per cent by the end of the year.



Internal workings show that as world demand collapsed in 2009, the annual percentage changes in the aggregate compensation per employee followed a downward trend to stand at a negative 0.2 per cent by the last quarter of 2009. When weighted against productivity developments, wages have led to increasing labour costs during 2009, reflecting significant increases during the first two quarters of the year which were partly mitigated during the last two quarters of the same year. By the end of 2009, the change in unit labour costs stood at a positive 2.6 per cent when compared to 2008⁵.

These developments are indicative of decisions taken by firms whose products were most affected by lower global demand. In fact, a number of local firms, aided by government support schemes, opted to meet demand fluctuations by reducing the number of hours worked rather than by varying the number of employees such that they avoid losing workers whose skills and experience make them particularly valuable to their firm when the recession ends. Consequently, as the economy fell into recession, unit labour costs rose because the decline in output was accompanied by a proportionally smaller drop in the number of employees. Nonetheless, following the prolonged period of low demand, a decline in the number of employed persons and compensation per employee was observed during the last quarter of 2009.

At a disaggregated level, compensation per employee declined during the last quarter of 2009 in the transport, storage and communication sector, the

manufacturing sector and the construction sector. While the former two sectors have traditionally recorded above average export shares in total output, the construction sector's activity is mostly domestically oriented. The latter development could thus potentially have an indirect effect on domestic inflation. Furthermore, one also notes that the economic sectors that are more exposed to external competition have undergone a downward adjustment in their compensation per employee.

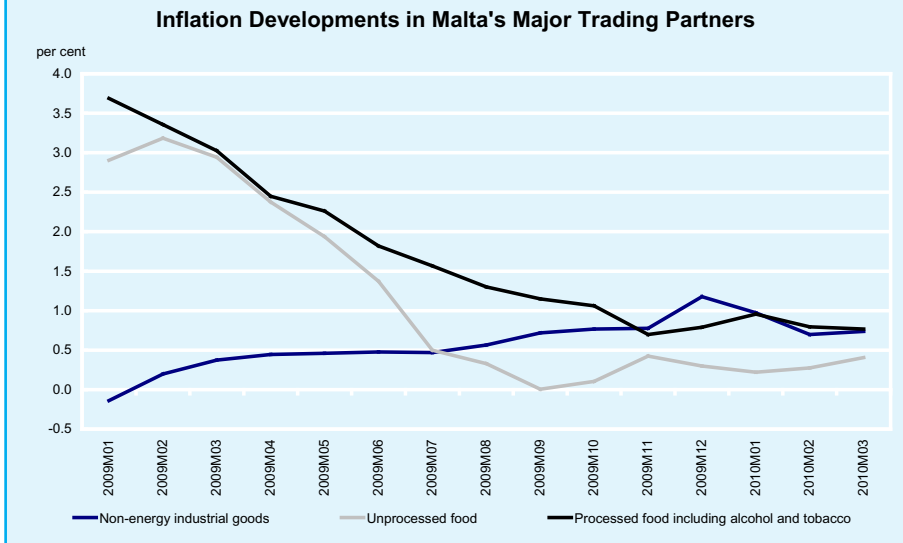
On the other hand, wages in real estate and business activities, wholesale and retail trade, public administration as well as electricity, gas and water supply sectors recorded positive growth. Nonetheless, the extent to which these are (or will be) reflected in domestic inflation depends on the respective sectors' pass-through of wage inflation to prices. In part, this depends on the respective wage shares and the markets in which the product is sold. In particular, the wholesale and retail trade sector, whose output is largely targeted at the domestic sector, has an above-average wage share. Consequently wage developments in the wholesale and retail trade sector are more likely to be reflected in the consumer price level.

2.3.2 Inflationary Developments in Malta's Major Trading Partners

Price developments in an open economy such as Malta are highly influenced by price developments in its major trading partners. The contribution is both direct, through the cost of imported consumer goods and services and indirect, through the cost of imported raw materials and intermediate goods and services used in the domestic production of consumer goods and services. This section attempts to identify this influence by analysing inflationary trends in Malta's major trading partners by using indicators for consumer inflation, the prices of imported industrial supplies, oil price developments as well as international commodity prices.

Chart 2.10 presents recent developments of indicators measuring annual inflation in Malta's major trading partners for consumer products, specifically, price developments for non-energy industrial goods, unprocessed food and processed food, including alcohol and tobacco. These were constructed by weighting developments in the HICP of Malta's major trading partners with their respective import shares. It is shown that following the steep rise recorded during 2008, the annual change in the consumer price of both processed and unprocessed food followed steadily decreasing trends. In fact, the annual inflation rate for processed food declined to around 1 per cent in the last two quarters of 2009 and the first quarter of 2010. Meanwhile, the annual change in the price of unprocessed food fell from an average of 2.5 per cent in the first

Chart 2.10



half of 2009 to relatively stable prices in the remaining months to March 2010. On the other hand, the annual price change for non-energy industrial goods followed a gradual upward trend from close to zero per cent at the beginning of 2009 to 1.2 per cent at the end of December 2009, declining marginally to 0.7 per cent by the end of March 2010. Thus, in view of the analysis presented in Part I, these figures indicate that the inflationary developments for food and non-energy industrial goods, especially over the course of 2009, may to an extent reflect the impact of domestically-driven pressures rather than the pass-through of externally generated inflationary pressures.

Other important international price developments faced by both producers and consumers are oil prices and exchange rates. Chart 2.11 shows developments in the price of oil for 2009 and the first quarter of 2010. Notably, the monthly average price per tonne of Platts 1% fuel oil has been on a generally upward trend, increasing from around €177 in January 2009 to €313 in December 2010. Similar developments were noted during the early months of 2010 as the average fuel oil price per tonne reached €355 by the end of the first quarter of 2010, exerting further inflationary pressure on both domestic consumers and producers. These developments have been to an extent reflected in the contribution of energy-related products to inflation in Malta as described in Part I.

Turning to exchange rate developments, as shown in Chart 2.12, during the first

Chart 2.11

Monthly Average Fuel Oil Price per tonne

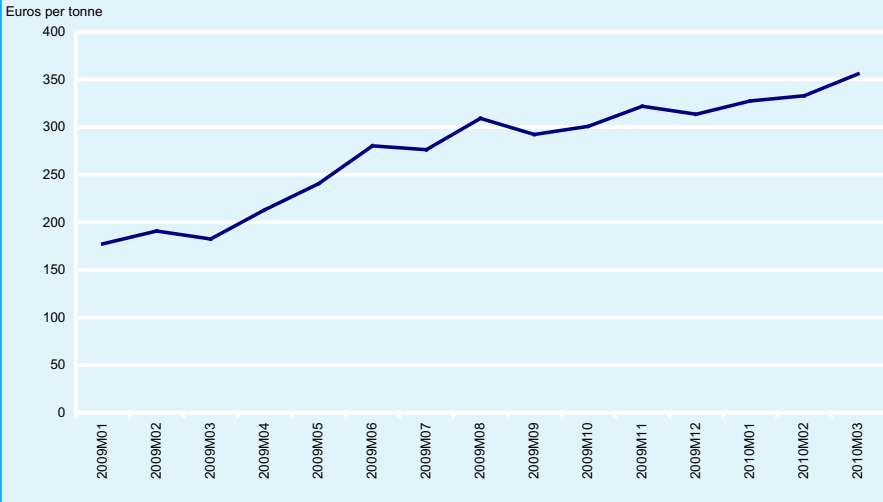
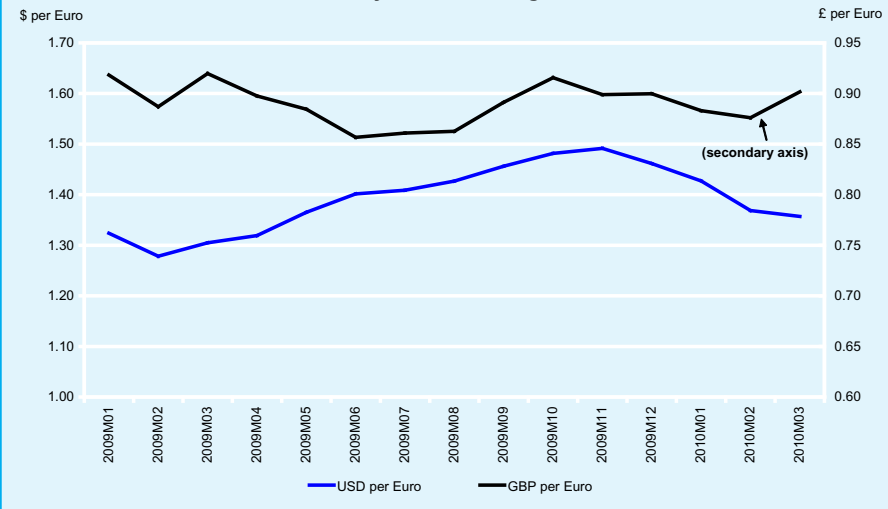


Chart 2.12

Monthly Euro Exchange Rate



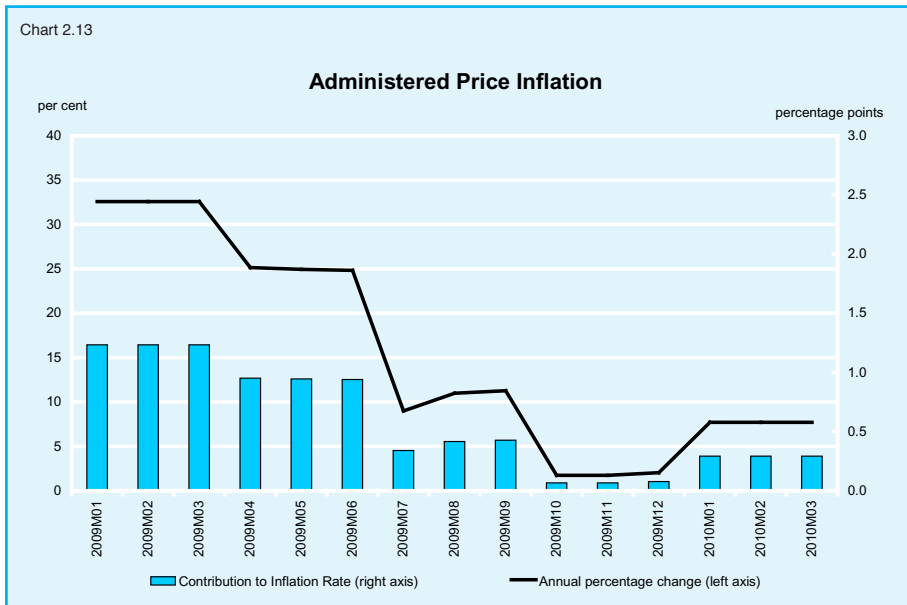
three months of 2010 the US Dollar has been recovering against the Euro while the relative strength of the British Sterling has remained relatively stable at around 0.90 British Pounds. In fact, at the end of March 2010, every Euro was equivalent to 1.35 US Dollars, down from 1.49 US Dollars in November 2009. These developments suggest that purchases from abroad made in US Dollars, particularly fuel oil, have become relatively more expensive in recent months. On the other hand, from a competitiveness perspective, Maltese exports ought to have become relatively cheaper for non-domestic purchasers from outside the Euro Area. The impact of these exchange rate movements on domestic price levels depends on the proportion of trade denominated in these respective currencies, an exercise that is constrained by the limited coverage of statistics. However, as an illustration one notes that in March 2010 the share of imports of goods from the UK in total imports of goods hovers around 15 per cent.

2.3.3 Administered Price Inflation

Administered prices, covering the prices of all goods and services which are influenced by government, may also have a significant impact on inflation developments. In line with Eurostat's definition, these include prices of water supply, electricity, gas, liquid fuels, other services in respect of personal transport, passenger transport by road, passenger transport by sea and postal services. They are said to be fully administered when the price of a good or service is set directly by government and to be mainly administered when government or any national regulator has a significant influence on the price of a good or service. Consequently, decisions taken by government or any other national authority can have a significant effect on consumer prices.

According to this measure by Eurostat, administered prices increased steadily during 2005 and 2006, declining during 2007 and the early months of 2008. Since July 2008, administered price inflation increased steadily again to stand at 25.9 per cent at the end of 2008.

Chart 2.13 shows the annual percentage change in administered prices for a more recent period, specifically for 2009 and the first quarter of 2010 and the corresponding contribution to the inflation rate of consumer prices in percentage points. It is noted that the annual percentage change in administered prices was significantly high in the first six months of 2009, declining to around 10 per cent in the third quarter of the year and below 2 per cent in the fourth quarter. During the first quarter of 2010, administered prices rose again to around 7.7 per cent. These developments were reflected in the contribution of administered prices to the aggregate inflation rate. In fact, the average contribution declined gradually from around 1.2 percentage points in the first three months of 2009



to rates which are close to zero during the last three quarters of the same year. In the early months of 2010, the average contribution increased marginally to around 0.3 percentage points.

To a large extent these developments reflect price changes in electricity prices. Other significant contributors were gas and passenger by transport road prices. Overall, the noted trends show that administered prices had an impact on the overall inflation rate faced by domestic consumers during the period under analysis.

2.3.4 Profit Margin

Profit margins, defined as the ratio of Gross Operating Surplus to Output, are a crucial determinant of the price level in the economy. In particular, in times when unit labour costs are rising businesses might temporarily absorb the pressure by cutting profit margins.

Between 2004 and 2007, profit margins increased by almost 2 percentage points. However, Table 2.5 shows that as the Maltese economy fell into recession profit margins declined significantly in an attempt to safeguard jobs and employees' compensation until international demand for domestically produced commodities recovered. In fact, during the first and second quarter of 2009, the profit margin declined by 0.5 percentage points and 1.1 percentage

Growth Rates in Value Added

Table 2.5

	2009Q1	2009Q2	2009Q3	2009Q4
Real GDP (% growth)	-2.0	-3.9	-2.4	0.5
Profit Margin (pp. growth)	-0.5	-1.1	0.4	1.0
Compensation per employee (% growth)	3.3	1.1	0.0	-0.2
Employment (exc. self-employed) (% growth)	0.7	-0.3	-1.4	-1.9

Source : NSO

points respectively whereas both compensation per employee and employment recorded marginal increases or remained relatively stable. As negative GDP growth continued during the third quarter of the year, adjustments in the labour market made up for the loss in the profit margin noted during the first half of the 2009. In fact, profit margins increased by 0.4 percentage points and 1 percentage point in the third and fourth quarter of the year, while employment declined by 1.4 per cent and 1.9 per cent. Meanwhile, compensation per employee remained relatively stable.

Consequently, it may be concluded that changes in price of domestically produced goods and services were largely contained as profit margins varied inversely to developments in the labour market. To a large extent, these developments may reflect that Maltese export oriented firms are largely price takers on the international market and are not in a position to increase export prices due to competitiveness pressures.

2.3.5 Conclusion

Overall, the noted developments are indicative of high labour costs but lower profits during the first two quarters of 2009. These trends were reversed during the last two quarters of the year as developments in the labour market responded to the negative growth in real GDP experienced during the first three quarters of the year, indicative of some degree of flexibility in the labour market. Nonetheless, on aggregate, unit labour costs during 2009 were still on the increase. Administered price inflation – a measure of inflation that reflects developments that are to some extent influenced by government – declined sharply during the second half of 2009 mainly in reflection of a base-effect related to the date of the introduction of the water and electricity tariffs. Nevertheless, administered price inflation was on the increase in the first quarter

of 2010. Meanwhile, retail prices of food and producer prices in Malta's major trading partners were noted to be on the decline, suggesting that imported inflation is unlikely to be a driver of local inflation for these categories. On the other hand, higher oil prices and a less favourable exchange rate vis-à-vis the US Dollar provide an early sign of potential inflationary pressures in the near term.

Footnotes:

¹ Various techniques can be employed by economists to measure potential output even if this is not observed directly in the statistics. The following analysis is based on the production function method used by the European Commission to estimate the output gap.

² Sections 1.2 to 1.5 are based on National Accounts Gross Domestic Product data issued in March 2010 and covering the period until the fourth quarter of 2009.

³ While aggregate real investment data is available and was utilised, disaggregated data by product type is only available on a nominal basis.

⁴ This is based on National Accounts data for employment.

⁵ In National Accounts data the voluntary redundancy schemes of Malta Shipyards Ltd workers are included in Compensation of Employees. After adjusting for the cost of these schemes, nominal unit labour costs in 2008 rose by 2.5 per cent and 3.6 per cent in 2009.

3. Outlook for Inflationary Pressures

3. Outlook for Inflationary Pressures

Inflationary pressures partly reflect what is happening in the real economy where the interaction of demand and supply of goods and services stimulates movements in price levels. Thus, the macroeconomic outlook as well as the expected price trends for main commodities and inputs play an important part in the price formation process. What follows is a brief overview of the short-to-medium term outlook for the main components of demand together with other key indicators and consequently the implications for inflation over the short-to-medium term. Major risks to the outlook are also considered.

3.1 International Macroeconomic Developments

Following the severe and unfavourable economic conditions prevailing for most of 2008 and 2009, a gradual recovery is increasingly becoming evident, as highlighted also in section 2.1.7. The latest economic developments in the European economies and the US point towards an overall improving environment with exports gradually rising and industrial production recording positive growth. The recovery registered in the last quarter of 2009 and in the first few months of 2010 was underpinned by various factors primary amongst them being the exceptional demand-supporting policy measures taken by Governments and Central Banks in 2009 and the favourable growth in a number of emerging and developing economies. In fact, growth in emerging and developing countries is proving to be more dynamic than previously expected, driven by high growth rates in emerging economic powerhouses such as China, India, and Brazil. These economies are set to expand strongly over the coming period on the back of buoyant domestic and regional demand, net exports and capital inflows.

Nevertheless, the recovery in the EU is expected to be gradual, being export-led with a pick-up in exports feeding through investment. This in turn is expected to stimulate employment, albeit with a lag, and consumption expenditure. Indeed, according to the European Commission's Spring Forecasts, exports of goods and services in the EU are expected to expand by 5.0 per cent for 2010 and by a further 5.2 per cent in the following year. However, investment is not expected to contribute positively to growth in 2010, while it is expected to increase in 2011 by around 1.8 per cent and 2.5 percent in the Euro Area and the EU, respectively. The various components of demand in real terms are displayed in Table 3.1.

Despite the favourable developments in global trade, the European economies

Demand Components in the EU and the Euro Area

(percentage change)

Table 3.1

	2008	2009	2010	2011
Final Demand				
Euro Area	0.7	-6.3	1.4	2.2
EU	0.9	-6.5	1.6	2.5
Private Consumption Expenditure				
Euro Area	0.4	-1.1	0.0	1.1
EU	0.8	-1.7	0.1	1.3
Government Consumption Expenditure				
Euro Area	2.1	2.3	0.9	0.3
EU	2.3	2.2	1.0	0.1
Total Investment				
Euro Area	-0.6	-10.8	-2.6	1.8
EU	-0.6	-11.5	-2.2	2.5
Exports of Goods and Services				
Euro Area	1.0	-13.0	4.9	5.0
EU	1.5	-12.3	5.0	5.2
Imports of Goods and Services				
Euro Area	1.1	-11.5	2.9	4.2
EU	1.4	-12.1	3.4	4.6

Source: European Commission

are still facing a number of factors that can potentially restrain their growth prospects over the foreseeable future. In particular, the withdrawal of temporary fiscal support measures will continue to affect the profile of demand as will the continued turning of the inventory cycle and the drag of declining housing investment. Furthermore, following developments in sovereign bond markets in the last quarter of 2009 and into the first quarter of 2010 and rising market concerns with respects to public finances sustainability issues in a number of Member States, the urgent need for further fiscal consolidation can also constrain domestic demand in the EU.

Despite the recent and concrete signs of recovery in the real economy, the situation in the EU labour market remains challenging, partly reflecting the usual lag between employment and output. Nevertheless, signs of stabilisation have begun to emerge with higher employment expectations and marginal decreases in unemployment forecasted for 2011 following the worsening

expected during 2010. During 2010, employment is expected to decrease by 0.9 per cent and unemployment to rise by 0.9 percentage points to 9.8 per cent. Meanwhile during 2011, employment is expected to increase by 0.3 per cent with the unemployment rate decreasing marginally by 0.1 percentage points to 9.7 per cent. These developments partly explain the rather subdued rates of growth in private consumption for 2010 and 2011. A selection of key indicators is displayed in Table 3.2.

Given the decline in output registered in the preceding months, the decline in inflation is rather contained. In a way this is attributable to several factors, including, generally well-anchored inflation expectations, nominal downward rigidities that become more binding at very low inflation, labour hoarding which may have raised unit labour costs, and firms resisting lowering prices and margins in an effort to rebuild working capital. In the EU, the still low

Key Indicators				
Table 3.2	2008	2009	2010	2011
Output (percentage change)				
EU	0.7	-4.2	1.0	1.7
Euro Area	0.6	-4.1	0.9	1.5
Germany	1.3	-5.0	1.2	1.6
France	0.4	-2.2	1.3	1.5
Italy	-1.3	-5.0	0.8	1.4
Spain	0.9	-3.6	-0.4	0.8
UK	0.5	-4.9	1.2	2.1
Japan	-1.2	-5.2	2.1	1.5
US	0.4	-2.4	2.8	2.5
Advanced Economies	0.5	-3.2	2.3	2.4
Emerging and Developing Economies	6.1	2.4	6.3	6.5
Consumer Prices (percentage change)				
EU	3.7	1.0	1.8	1.7
Euro Area	3.3	0.3	1.5	1.7
Germany	2.8	0.2	1.3	1.5
France	3.2	0.1	1.4	1.6
Italy	3.5	0.8	1.8	2.0
Spain	4.1	-0.3	1.6	1.6
UK	3.6	2.2	2.4	1.4
Japan	1.4	-1.4	-0.5	-0.4
US	3.8	-0.4	1.7	0.3
Advanced Economies	3.4	0.1	1.5	1.4
Emerging and Developing Economies	9.2	5.2	6.2	4.7
Labour Market (EU)				
Employment (percentage change)	0.9	-2.0	-0.9	0.3
Unemployment Rate	7.0	8.9	9.8	9.7
<i>Source: IMF, European Commission</i>				

levels of capacity utilisation, subdued labour cost pressures, and low inflation expectations are expected to keep inflation low with a rate of 1.8 per cent and 1.7 per cent for 2010 and 2011, respectively. The outlook for commodity prices (see next section) is also expected to contribute to price developments in Malta's main trading partners. Prices in the UK are expected to increase by 2.4 per cent in 2010 and by 1.4 per cent in 2011. According to the European Commission, this rather high level of inflation in the UK is partly attributable to an unexpectedly long-lagged effect of sterling's depreciation since mid-2007. In other major trading partners, inflation in 2010 is expected to be more subdued with rates of 1.3 per cent in Germany, 1.4 per cent in France, and 1.8 per cent in Italy. For 2011, a slight increase in inflation above the rates of 2010 is expected.

On a global level, price developments are expected to differ considerably across countries, with developed economies exhibiting a decline in their core inflation since the first half of 2009 while in many emerging economies inflation is still expected to be relatively high. Price formation in Russia is expected to be around 6.0 per cent in 2010 and 5.4 per cent in 2011. Similar developments are expected in India with an inflation rate of around 8.1 per cent and 4.6 per cent for 2010 and 2011 respectively. Inflation in Brazil and China are expected to be more contained, with inflation in Brazil forecasted to be around 5.3 per cent in 2010 and 4.8 per cent in 2011 while price increases in China are expected to increase by around 3.1 per cent in 2010 and 2.4 per cent in 2011.

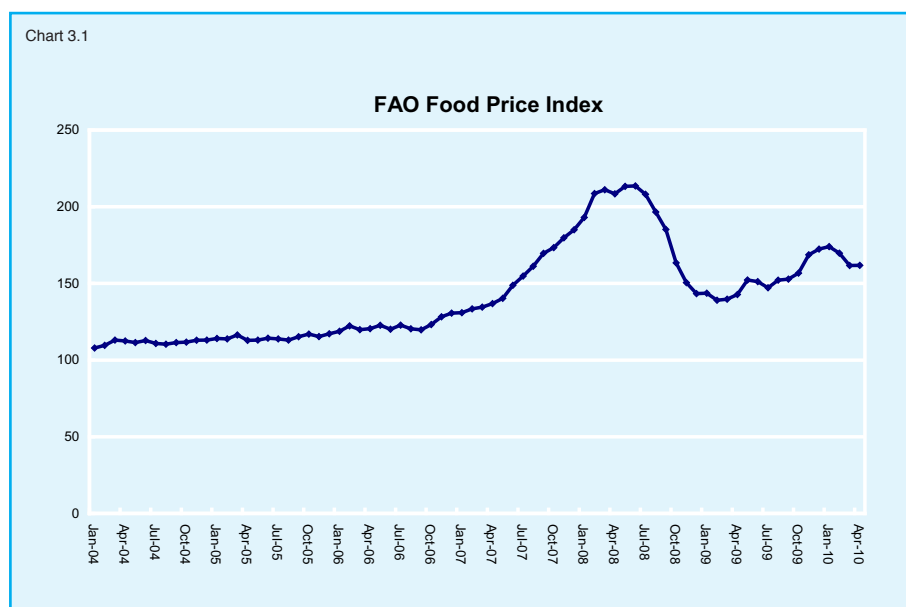
3.2 Exchange Rates and Commodities

According to the Spring 2010 Forecasts of the European Commission, the euro is expected to experience a slight depreciation with respect to the US Dollar during the current year and is expected to remain broadly stable over the short to medium term. Similarly, the Euro is expected to depreciate marginally vis-à-vis the UK Sterling during 2010 and to remain broadly unchanged during the subsequent two years. Past movements in the exchange rate of the euro vis-à-vis the US\$ and the UK Sterling are illustrated in Chart 2.12 in Section 2. It should be highlighted that recent developments in exchange rate markets show that such forecasts are subject to a high degree of uncertainty.

Commodity prices were a major factor underpinning recent inflationary developments. As major economies entered in recessions, commodity prices declined considerably during the last few months of 2008 and the start of 2009. However, a sharp rebound was staged following the first signs of economic recovery. By the end of 2009, the IMF Commodity Index rose by more than 40 percent from its trough, largely on account of large increases in petroleum

prices (over 70 per cent) and metal prices (over 60 per cent). Following the heavy increases in food prices during 2007 and 2008, a substantial decline was registered in 2009 with a fall in the FAO food price index of 21 per cent. However, for the first four months of 2010, prices of food again increased by 18 per cent over the same period of 2009, with particularly heavy increases in dairy products prices and sugar prices. These developments in food commodities might raise concern about another round of high prices similar to that witnessed in the 2007/8 period, even if broader macroeconomic conditions facing the markets today are different.

At the onset of the price surge in 2007, FAO identified a number of possible causes contributing to the price rise including low levels of world cereal stocks, crop failures in major exporting countries, rapidly growing demand for agricultural commodities for biofuels, and rising oil prices. What made the 2007/08 price spike exceptional was the concurrence of so many factors culminating in an unprecedented price rally and the fuelling of volatility. At this current juncture, the economic conditions are different and it is thus unlikely that the same combinations of factors take place again. Additionally, general supplies held by exporters are far more capable of responding to rising demand than previously. Unlike other commodities, food prices have recovered only modestly from the trough in December 2008. This is attributable to increases in the supply for many major crops reflecting a trend of rising production. However, with global demand likely to remain high, both in terms of food consumption and in terms of demand for crops as bio-fuel, prices of food are expected to



face upward pressure in the short to medium term. Chart 3.1 illustrates the FAO Food Price Index which is a measure of the monthly change in international prices of a food basket composed of cereals, oilseeds, dairy, meat and sugar.

As highlighted in section 2.3.2, after the low levels recorded in the first half of 2009, oil prices recovered rapidly. Prices have mainly fluctuated between \$70 and \$80 a barrel during most of the second half of 2009 and the first quarter of 2010. The near-term outlook for oil prices depends heavily on the fundamental principles of the interaction between demand and supply. On one end, global growth is expected to accelerate in 2010 while on the other hand both OPEC spare capacity and OECD inventories are still above recent historical average. This could lead towards a situation where upward price pressures remain moderate for some time, barring any significant change to the medium term economic outlook. Thus, taking into account the developments in the first months of 2010 and indications on the basis of future prices for Brent Crude, international oil prices are expected to be around \$84.8 in 2010 and at \$91.2 in 2011.¹

Metal prices have also registered a significant rebound during 2009. The price rebound was largely driven by the stronger-than-expected recovery in emerging economies with supply factors also playing a supportive role. On the demand side, although metal consumption declined in most economies in 2009, Chinese demand grew by about 24 per cent. As regards the outlook for the medium term, metal prices are expected to rise only gradually, in line with the general outlook for commodities.

Concluding, in spite of the rapid rebound in prices during this global recovery, prices in a number of key commodity markets are still projected to remain high over the medium term by historical standards as commodity demand is expected to increase, whereas spare capacity and inventory buffers are likely to decline over the coming months.

3.3 Outlook for Inflationary Developments in Malta

As argued above, inflationary developments for the short to medium term are determined by a combination of forces, chief amongst them macroeconomic factors, exchange rates movements, trends in commodity prices as well as policy measures. Thus in view of the uncertainty at this current juncture associated with the factors outlined above, the conclusions of this section need to be treated with an element of caution.

From a macroeconomic perspective, the global economy is undergoing a mild recovery albeit there are still significant downside risks to the growth prospects. Even if the speed of recovery is expected to differ among Malta's trading partners, however growth in these economies is still expected to remain below potential. Additionally, inflationary pressures in Malta's main trading partners are expected to be modest mostly because of spare capacity and still weak labour market.

In view of the gradual recovery in the global economy, the Maltese economy is expected to improve although a number of risks still remain. The labour market is still expected to remain subdued as it responds with a lag effect to developments in GDP. In view of the spare capacity characterising the current phase of the business cycle, it is unlikely that domestic inflationary pressures build up as a result of unfulfilled demand and tight labour market. At the same time one also notes that utility prices in Malta are expected to remain stable during the current year in line with Government's policy of keeping unchanged utilities' prices over an agreed period so as to minimise as much as possible uncertainty derived from frequent changes in prices. On the other hand, moderate pressures from imported inflation could be present as the modest increase in commodity prices, in particular food and energy might be compounded by the expected weakening of the euro.

Footnote:

¹Oil future prices on the basis of information extracted on the 30th April 2010