

On Recent Changes of Debts of Cyprus Households: The 1999 and 2002 Cyprus Surveys of Consumer Finances*

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30 January 2006

Abstract

This paper describes and compares participation of Cyprus households in various types of debts using data from the first (1999) and second (2002) Cyprus Surveys of Consumer Finances. It complements our previous papers that separately described household participation in various types of assets (Haliassos et al., 2001) and of debts (Haliassos et al., 2003). We consider a wide range of debts that encompass personal unsecured loans, including credit card debt, as well as loans secured by housing collateral, mainly mortgage debt. Findings are of considerable policy interest, as they show how various demographic groups changed their participation and exposure to various loans between the unparalleled stock market boom of 1999 and the period following the stock market downturn, as captured by 2002 data.

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The Cyprus Surveys of Consumer Finances are funded by the Central Bank of Cyprus. We are very grateful to George Georgiou for useful comments and to Antonia Georgiou and Michalis Michael for excellent comments and research assistance. The views presented here do not necessarily represent the views of the Central Bank of Cyprus.

1. Introduction

In March 1997 the University of Cyprus and the Central Bank of Cyprus embarked on a research project titled “*Portfolios of Cyprus Households*” designed to collect data on assets, liabilities and income flows from a sample of the Cyprus population. Two waves of the Cyprus Survey of Consumer Finances (CySCF), one in 1999 and the other in 2002, are products of this ongoing project that is funded by the Central Bank of Cyprus. A third wave (for 2005) is currently in production.

The Cyprus Survey of Consumer Finances (CySCF) is designed to gather detailed and comprehensive information on assets, liabilities, income and other financial characteristics from a representative sample, following the example of the US Survey of Consumer Finances (SCF). A wide range of descriptive statistics from the 1999 CySCF, which offers a picture of family finances for the period 1998-1999, can be found in Haliassos *et al.* (2001, 2003) while an analogous set of findings for the 2002 CySCF, which offers a picture of family finances for the period 2001-2002, can be found in Antoniou *et al.* (2004).

In this paper we report the debt distribution of Cyprus households, including changes that occurred between the first (1999) and the second (2002) waves of the Cyprus Survey of Consumer Finances. We consider various types of household debt, including credit card balances, other lines of credit, home secured debt, debt secured by other residential property, and educational loans. We link debt behavior of households to important characteristics, such as age, wealth, income, education, employment, and homeownership status.

The sampling design of CySCF is based on standard area-probability multi-stage sampling techniques and provides two samples, main and wealthy. The main sample is representative of the population and is included to ensure adequate representation of broadly distributed characteristics. The wealthy sample is included for an accurate representation of the small proportion of households having a large share of income and wealth. Details of the sampling design for the 1999 and 2002 CySCF can be found in Karagrigoriou and Michael (2001) and Karagrigoriou, Michael and Antoniou (2004).

For the 1999 CySCF, 1097 questionnaires (539 for the main sample and 558 for the wealthy sample) were collected. Following the implementation of geographic and income weights, the final sample was increased to 1361 (666 for the main and 695 for the wealthy sample). For the 2002 CySCF, a total of 897 interviews were completed, 521 for the main sample and 376 for the wealthy. After the implementation of the geographic and income weights to the 2002 CySCF data base, the weighted main sample size increased to 686 (98.6% of the target of 696) and the weighted wealthy sample size to 511 (99.2% of the target of 515). It should be noted that the same questionnaire was used to interview respondents in both the main and the wealthy samples. The interviews were conducted in person and averaged about one and a-half hours. Within each household surveyed, every effort was made for the questionnaire to be completed by the household member in charge of handling finances.

2. Debt Participation

Tables 1A and 1B show household debt participation for various demographic groups. The share of households with any type of debt decreased slightly from 63.14% in 1999 to

62.29% in 2002. Still, not all demographic groups exhibited reduced incidence of borrowing. Participation, increased in credit card balances, other residential properties and car loans and decreased in home secured debt and educational loans.

Home-Secured Debt

Both in the 1999 and 2002 surveys, the highest debt participation of households was in home secured debt, which refers to mortgage loans made by households in order to obtain a primary residence. Between 1999 and 2002 home secured debt as a share of total family debt declined slightly from 56.38% to 54.8%.¹ Moreover, the overall participation in mortgages among all households also declined slightly, from 29.95% in 1999 to 29.77% in 2002. Participation initially increases with age and reaches its maximum in the age group 30-49 in both surveys.² Past this age, participation drops, as households approach the peak of their career, earn higher incomes and are in a position to pay off any outstanding mortgage.

Debt secured by Other Residential Real Estate

Investment real estate includes residential and non-residential property other than the primary residence and not owned by a business. From 1999 to 2002 there was an increase in the proportion of households with loans backed by real estate other than their primary residence. More specifically, the proportion of households with such loans increased from almost 4.96% to 6.37%, an increase of 28%. The increase was much higher among households with relatively high income. Specifically, the increase was

¹ Source: 1999 and 2002 CySCF surveys.

² 41,60% and 45,33% among those in the age group 30-39 in 1999 and 2002, respectively, and 40,24% and 39,37% among those in the age group 40-49 in 1999 and 2002, respectively.

over 100% among households with an annual overall income in the top two categories³. Furthermore, the increase observed was substantial where the age of the household head was above 50. Indeed, in the 50-59 age group the proportion in 2002 doubled between 1999 and 2002. Households owning an apartment and those living in a refugee house exhibited substantial increases in this type of debt. In the former category, the increase was over 30% and in the latter case it was more than 300%, from 0.89% in 1999 to 3.93% in 2002. By comparison, the increase for those renting a dwelling was almost 20%, from 4.64% in 1999 to 5.44% in 2002.

Credit Card Debt

Credit cards were introduced in the early 1980s and grew significantly during the 1990s. According to unpublished Central Bank data the number of credit cards reached 350,000 by the end of 2001. The overall percentage of Cyprus households that carry a credit card based on the CySCF is estimated at 41.7%⁴ for 1999. This percentage has increased to 50% in 2002 reflecting the increased promotion of commercial banks regarding credit cards. Indeed, banks tend to have a policy of offering credit cards together with checking accounts. Close to half of credit card holders (48.19%) in 1999 had outstanding balances on their credit cards bringing the population percentage of debt revolvers to slightly above 20% (Haliassos et al., 2003). In 2002, conditional on having a credit card, the percentage of Cyprus households that had unpaid credit card balances was 40.69%, while the population percentage of debt revolvers was 20.37%. The percentage

³ The top two income categories are CY£35,001 – CY£40,000 and over CY£40,000. For instance, the increase among households with an income over CY£40,000 was over 100%, rising from 8,34% in 1999 to 18,21% in 2002.

⁴ Source: 1999 CySCF survey.

of households that had unpaid credit card balances decreased in 2002 compared with 1999, due to the fact that prior to 2001, interest rates between credit cards and other loans were about the same since there was an interest rate ceiling. After the liberalization of interest rates in 2001, however, interest rates on checking accounts followed a declining trend, whereas interest rates on credit cards increased. As a result, borrowing on credit cards became relatively more expensive than borrowing through a loan and people switched from credit card borrowing to other means of borrowing. Still, due to the increased participation in credit cards, the population percentage of debt revolvers remained the same between the two comparison years.⁵

The incidence of revolving credit card debt increases with income (in both surveys), and this is associated both with a greater tendency of higher income households to have credit cards and with greater tendency to revolve debt conditional on having a card. According to the 1999 CySCF, the incidence of revolving credit card debt, initially increases with age, reaches its peak (25.82%) in the age group 40-49 and then declines with age, reaching its lowest level at the age of 70 and over (10.22%). This is mostly because a middle-aged adult is more likely to have a well paid job than an individual in his or her twenties, and thus to qualify for a credit card. It reaches its lowest level beyond the age of 70. This is probably the combined effect of belonging to cohorts that were not accustomed to using credit cards during their youth and middle age, and of facing smaller needs to spend. By contrast, the 2002 CySCF shows a tendency to revolve credit card debt that declines monotonically with age, reaching its lowest level at the age of 70 and over (3.04%). This probably reflects the greater ease with which banks started offering credit cards to younger households opening checking accounts, who are also likely to

⁵ The percentage of debt revolvers was 20,11% and 20,37% in 1999 and 2002, respectively.

face greater need to borrow and more limited access to lower-cost loans due to absence of collateral.

There seems to be no clear relationship between employment status and the incidence of revolving credit card debt. In the 1999 CySCF, retired households participate at greater rates (24.39%) than any other group of households. In the 2002 CySCF, public and private employees exhibit higher participation rates and retirees participate at much lower rates.

Other Lines of Credit

The other lines of credit include all store debit accounts. The 1999 survey shows that among other lines of credit the unemployed appear to have had the highest participation rate, equal to 12.02%. These were followed by the (mostly low income) households residing in Turkish Cyprus properties in the area under the control of the Republic of Cyprus, the participation of which was equal to 9.67%. According to the 2002 survey, the highest participation in other lines of credit was reported by those residing in refugee houses (10.15%) followed by the unemployed (9.41%). The unemployed possibly depend more than any other group on other lines of credit to cover short-term needs. A similar argument holds for the mostly low income households residing in Turkish Cyprus properties or in refugee houses.

Various other debts

The proportion of households borrowing to buy a car saw an increase of almost 200%, from 6.13% in 1999 to 17.62% in 2002. All demographic groups saw an increase

in participation from 1999 to 2002. More specifically, for those households in the age group 30-39 car loan participation almost quadrupled, whereas for the age group 29 or below households increased borrowing on car loans by more than nine times. Significant increases also occurred among all households where the head was in employment.

The proportion of households aged 29 and below who had educational loans did not exceed 3% both in 1999 and 2002. The participation rates recorded for individuals in the age group 50-59 were about 17% and 12% in 1999 and 2002 respectively. This unusual age distribution is attributed to the fact that in Cyprus, educational loans are not given to students but to their parents. This is likely to have important implications for social mobility, because loans are not given to deserving students directly but on the basis of the income status of their parents.

Other debts include overdrafts, store loans, medical loans, loans from friends and relatives and any other type of debt not included in the previous categories. From 1999 to 2002 the proportion of households that incurred other types of debt fell slightly from 25.94% in 1999 to 24.99% in 2002. The use of other debt is spread across demographic groups but the changes from 1999 to 2002 are mixed.

3. Household Debt Levels

Tables 2A, 2B, 3A and 3B show the mean and median values of debt respectively for those households that held specific types of debt in 1999 and 2002. Over the period 1999 – 2002, the mean amount of outstanding debt increased in real terms, both overall and in almost all demographic groups, but not across all debt instruments. Average liabilities of Cyprus households increased from 1999 to 2002, with mean total household

debt among those with debt increasing by 20% (from CY£20.457 in 1999 to CY£24.586 in 2002). Among holders, the mean amount of home secured debt, other residential property, educational loan debt and balance on credit cards increased between 17%⁶ and 41%⁷ from 1999 to 2002, whereas the mean size of car loans actually decreased by 30% between 1999 and 2002. The drop in size of car loans is probably associated with the dramatic shift towards affordable, second-hand reconditioned cars imported from Japan during this period.

For credit card balance, mean and median values, conditional on participation, were similar for most demographic groups, indicating fairly symmetric distributions without a large number of extreme values / outliers in both 1999 and 2002. Regarding other lines of credit, households with income ranging between CY£20.001 and CY£25.000 and households in the lowest age group (under 29) appear with much higher conditional mean and median values in 1999 than in 2002.

It is clear from tables 3A and 3B that the picture is mixed as far as changes in median amounts from 1999 to 2002 are concerned: during this period “typical” households chose to borrow amounts significantly higher than in the past in some types of loans and lower amounts in other types. Unusual observations in a data set such as extreme values or outliers can influence the mean but not the median of the data set. The presence of such outliers is strongly indicated by the observation that the increase of the mean amount of total debt outstanding in 2002 compared to 1999 was as much as 20 percentage points, while , the corresponding median amount of debt outstanding in 2002 was just 2 percentage points down from the 1999 figure of CY£11.352.

⁶ 17% was the increase in home secured debt.

⁷ 41% was the increase in credit card balances.

We concentrate below on median amounts, since they reflect more accurately behavior of the typical household. Tables 3A and 3B show that the median amount of debt outstanding in 2002 did not dramatically change from 1999, but lower income and younger households that did hold debt reduced their typical debt holdings. Households with high income (more than CY£25.000 per annum, in 2002 Cyprus Pounds) had higher median amounts of outstanding debt than lower income households. In particular, the range for median total debt for high income households in 1999 was between CY£19.600 and CY£27.700, while in 2002 the range was between CY£24.000 and CY£29.000. Clearly, there is a narrower range of variation in 2002 compared to 1999. On the other hand, median outstanding debt for medium income indebted households (with an annual income of between CY£20.001 and CY£25.000 or less) dropped from, at most, CY£16.500 in 1999 to, at most, CY£15.200 in 2002. It should also be noted that median outstanding debt of households belonging to the lowest income category (with an annual income of at most CY£5.000), fell in real terms by 17 percentage points. An even sharper drop was observed among young households where the age of the household head was less than 29. By contrast, the age groups 30-39 and 40-49 saw an increase of about 60% and 4%, respectively, in the median amount of outstanding debt.

4. Debt Composition

Tables 4A and 4B show the relative importance of different types of debt in overall debt portfolio for households in different demographic groups. Included are households having at least one type of debt. We report figures for four household characteristics, namely income, homeownership status, employment status, and age of the

household head. The shares of each type of debt for each row of tables 4A and 4B should add up to 100. For example, the total debt amount for those aged 29 or less who had debt, was distributed on average in 1999 as follows: more than half (51.89%) of total debt represented mortgage loans, 9.78% concerned other residential property loans, 1.58% credit card loans, 0.89% loans on other lines of credit, 2.15% car loans, 1.85% educational loans, and the remaining 31.86% represented all other types of loans.

Changes in the relative importance of different types of loans between the two surveys are in the same direction as changes in participation rates noted earlier. These changes occurred against a backdrop of financial liberalization and the removal of interest rate ceilings that took place in between the two surveys.

The most notable change between 1999 and 2002 is associated with debt secured by residential real estate other than the primary residence. In particular, the share of this particular type of debt rose from 13.16% in 1999 to 17.22% in 2002. This growth in importance may be reflecting a shift of funds from the stock market to investment in real estate following the 1999 stock market crash and the resulting disappointment of Cyprus households with stockholding.

Educational loans became somewhat less important in 2002 compared to 1999, but no change was observed in the age pattern of such loans. According to the 1999 CySCF, for individuals aged 29 or less, only about 2% of their loans were for education purposes, whereas for individuals in the age group 50-59 about 17% of their loans were educational loans. This is entirely consistent with the picture we observed above for participation rates. Lower percentages were recorded by the 2002 CySCF. Refugees, residing either in Turkish Cypriot houses or in refugee houses, had the largest proportion

of their loans in the form of educational loans. Refugees of the 1974 invasion typically do not need to borrow to purchase a house, as they get housing support through governmental programs. Moreover, their lack of collateral implies that they have difficulty obtaining collateralized loans.

5. Some International Comparisons

We now turn our attention briefly to a comparison with household debt participation and debt distribution in a financially developed country such as the United States. We then focus on home secured debt, which seems to be the most important debt for the typical household, and we compare the outstanding mortgage debt as a percentage of GDP at current prices between Cyprus and other financially developed countries. Finally, we look at the ratio of total debt to GDP at current prices in order to draw a picture of the financial solvency of households in Cyprus and other countries.

A greater proportion of Cyprus households own a house, yet a much lower proportion of Cyprus homeowners have a mortgage, compared to the US.⁸ Moreover, US households participate to a greater extent in mortgage loans compared to Cyprus households. Debt for real estate other than primary residence was higher as a percentage of total debt for Cyprus households compared with US households, even though the participation rates were about the same⁹. Moreover, ownership of credit cards is more widespread in the US than in Cyprus. In fact, 72.5% and 76.2% of US households were estimated to possess credit cards in 1998 and 2001 respectively, compared to 41.7% and

⁸ 86,0% and 83,0% of Cyprus households report in 1999 and 2002, respectively, that they own their primary residence compared to 66,2% and 67,7% of US households in 1998 and 2001, respectively.

⁹ See tables 5 and 6.

50% of Cyprus households in 1999 and 2002, respectively. In addition, the percentage of debt revolvers amongst those who have credit cards is at least twice as much in the US as in Cyprus, indicating that Americans may feel more comfortable to borrow on credit cards than Cypriots. Furthermore, amongst those with positive credit card debt, the median balance for Cyprus households in 1999 was only about 71% of the balance for US households. The respective ratio in 2002 was 98%.¹⁰ It is also worth noting that in Cyprus, car loans as a percentage of total household debt were quite significant, and that the participation rate of Cyprus households in car loans increased significantly in the 2002 survey, although their median size fell, as noted above. All these developments with respect to car loans are consistent with the surge in sales of cheaper second-hand cars imported directly from Japan after being reconditioned.

Let us now turn briefly to some macro data on debts (Table 7). Cyprus has the second largest home ownership participation when compared with the euro zone members, based on 2002 figures. The size of outstanding mortgage debt as a percentage of GDP varies considerably across countries, with ratios above 40% in the Netherlands, Denmark and Portugal and below 10% in Austria in 2003. For Cyprus the respective ratio for 2001 was about 31%.

Table 8 shows that the size of total outstanding debt as a percentage of GDP varies considerably across countries, with ratios above 100% in Denmark and the UK and below 60% in the euro area in 2004. For Cyprus the respective ratio for 2001 was about 56%. This is a relatively moderate deterioration in the financial solvency position of

¹⁰ Source: Recent Changes in U.S. Family Finances: Evidence from the 1998 and 2001 Survey of Consumer Finances. The comparison is based on 2001 constant prices and on the exchange rate of the Cyprus pound against the US dollar which prevailed on 27 January 2006 and which was 1 USD = CYP 0,4712.

Cyprus households over 1998, when total outstanding debt as a percentage of GDP for Cyprus was about 52%, significantly lower than in most other financially developed countries.

6. Concluding Remarks

Two key developments transformed the background against which the financial sector in Cyprus operated in the period between 1999 and 2002: financial liberalization (including abolition of ceilings on loan interest rates) and the burst of the stock market bubble. These developments were estimated in this paper to have been associated with increases in average real amounts of debt among indebted households in 2002 (with the exception of car loans and other lines of credit), but with lower typical size of debt (as measured by conditional medians) in most categories (with the exception of home secured debt and credit card balances). This suggests the presence of some heavy debtors in 2002, combined with a sizeable number of small debtors.

Estimated changes in indebtedness suggest that Cyprus households have responded in a rational way to economic incentives. Even though the overall percentage of Cyprus households that carry a credit card increased from 1999 to 2002 largely as a result of supply-side reasons, the population percentage of debt revolvers remained about the same because the percentage of households that had unpaid credit card balances decreased in 2002 compared with 1999. This decrease is what we would have expected to see, given that, following financial liberalization and removal of the ceiling on lending interest rates, credit card rates rose above those of other consumer loans, and especially overdraft facilities.

Similarly, the decrease in both the average and the median size of car loans among holders and the accompanying increase in their incidence can be rationalized by reference to the surge in popularity of factory-reconditioned second-hand cars imported from Japan that transformed the car market during this period.

As far as the composition of loans is concerned, perhaps the most notable change between 1999 and 2002 is the rise in debt secured by residential real estate other than primary residence. This increase in borrowing for investment real estate is consistent with the view that, following the burst of the stock market bubble in 2000, disappointed Cyprus investors turned to investment in real assets.

There are aspects of borrowing behavior of Cyprus households that are quite similar to more financially developed countries. The highest debt participation of households is observed for loans secured by the primary residence, as is the case for the US, as well. The bulk of total household debt in both countries is taken up by mortgages, even though in the US the proportion of home secured debt to total debt exceeds that in Cyprus. There are other aspects, such as credit card behavior, in which there is lack of similarity. US households exhibit greater participation in credit cards and also, conditional on having a credit card, the percentage of US households that have unpaid credit card balances exceeds that of Cyprus households. This may be partly due to the relative lack of experience of Cyprus households with credit cards, and partly to their greater ability to secure other types of loans, at least as evidenced by comparing responses to questions on the incidence of borrowing constraints.

Finally, by looking at total outstanding debt as a percentage of GDP, estimated from survey responses, Cyprus seems to exhibit lower or no higher ratios compared to

most financially developed countries listed in Table 8. Part of this may be due to potential underreporting of debts in survey data. It is unlikely to be due to limited availability of loans in general to those who need them, both based on informal observation of Cyprus households and on direct responses to the survey questions on the incidence of borrowing constraints. All in all, our findings in this paper suggest that Cyprus households participate in a wide array of loans but are unlikely to be facing threats regarding solvency, even following the stock market downturn and extensive financial liberalization.

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Table 1A: Household participation in debt (percentage), by selected characteristics of households and type of debt, 1999 survey

Household characteristic	Credit card balances	Other lines of credit	Home secured debt	Other residential property	Car loans	Educational loans	Other loans	Any debt
All households	20.11	3.62	29.95	4.96	6.13	7.18	25.94	63.14
Income per annum (2002 Cyprus pounds)								
5.000 or less	8.90	5.01	12.52	0.00	3.10	2.38	13.75	32.52
5.001-15.000	17.99	3.48	25.11	2.71	6.16	3.46	26.08	58.23
15.001-20.000	17.61	2.53	42.44	10.36	3.85	12.31	32.76	81.91
20.001-25.000	31.62	6.77	37.04	4.22	9.72	10.96	26.40	73.10
25.001-30.000	32.80	0.05	36.95	14.53	7.92	9.44	28.37	74.63
30.001-35.000	23.18	2.49	45.38	10.62	12.06	18.52	28.56	80.94
35.001-40.000	53.87	4.37	48.68	0.00	8.75	17.57	21.79	91.25
Over 40.000	32.72	1.26	39.36	8.34	8.73	15.66	35.66	75.94
Age of head (years)								
29 or below	20.27	3.91	22.36	2.82	2.79	3.05	26.53	61.02
30-39	24.62	2.99	41.60	6.69	7.17	1.12	29.61	75.82
40-49	25.82	4.66	40.24	6.30	7.88	7.57	32.70	73.34
50-59	13.67	3.67	23.11	4.40	7.14	16.82	23.86	61.16
60-69	13.28	4.39	10.87	1.95	2.79	7.49	17.54	41.53
70 or over	10.22	0.00	1.67	1.36	0.00	0.00	2.11	13.25
Current employment status of head								
Public employee	18.50	3.83	29.24	6.41	5.41	6.31	23.56	58.28
Private employee	19.87	2.99	29.63	3.94	6.80	9.21	27.00	66.19
Self-employed	20.51	3.20	27.94	4.21	6.88	6.75	29.68	64.15
Retired	24.39	2.62	31.70	7.44	5.38	6.07	23.63	63.37
Unemployed	17.68	12.02	43.37	2.62	3.38	5.67	24.46	66.55
Other	11.40	6.58	35.08	0.00	4.50	0.00	9.13	55.29
Homeownership status								
Owner of house	19.99	3.83	34.24	5.13	6.23	7.90	25.45	65.40
Owner of apartment	27.98	1.89	40.76	7.53	5.24	6.33	28.22	72.41
Renter of house or apartment	25.29	0.00	0.00	4.64	4.20	2.51	26.47	48.49
Residence in Turkish Cyprus premises	0.00	9.67	0.00	0.00	0.00	0.00	19.29	28.96
Refugee house	10.61	5.61	0.00	0.89	9.70	5.86	30.43	46.04

Table 1B: Household participation in debt (percentage), by selected characteristics of households and type of debt, 2002 survey

Household characteristic	Credit card balances	Other lines of credit	Home secured debt	Other residential property	Car loans	Educational loans	Other loans	Any debt
All households	20.37	3.39	29.77	6.37	17.62	5.01	24.99	62.29
Income per annum (2002 Cyprus pounds)								
5.000 or less	9.30	4.62	7.32	3.37	7.77	0.00	14.36	29.23
5.001-15.000	18.79	3.21	26.82	5.24	15.41	4.47	22.90	61.47
15.001-20.000	24.41	4.10	37.69	7.18	19.79	5.28	28.51	77.13
20.001-25.000	33.39	3.17	43.86	6.21	29.56	7.24	33.15	77.81
25.001-30.000	26.06	0.00	45.40	8.83	17.65	7.57	38.25	77.76
30.001-35.000	28.30	1.89	41.51	11.32	24.53	11.32	24.53	67.92
35.001-40.000	14.48	2.73	39.16	19.13	41.89	10.93	16.39	80.97
Over 40.000	19.17	4.79	39.30	18.21	14.38	10.54	36.95	77.21
Age of head (years)								
29 or below	35.03	1.00	25.13	5.37	30.11	0.00	27.30	79.09
30-39	32.73	3.71	45.33	5.95	27.85	0.40	40.26	81.32
40-49	20.92	3.85	39.37	7.59	18.07	7.72	30.92	73.89
50-59	13.28	3.28	30.69	8.88	17.81	12.47	21.43	63.10
60-69	14.13	1.59	10.92	4.09	4.25	3.39	9.61	32.40
70 or over	3.04	6.11	1.88	3.28	1.88	0.00	4.43	17.98
Current employment status of head								
Public employee	28.59	3.68	44.60	9.28	19.90	10.45	31.83	77.88
Private employee	23.10	3.35	32.21	5.56	20.95	4.91	29.51	68.18
Self-employed	18.76	2.77	31.27	6.36	20.66	4.00	25.54	67.87
Retired	10.26	3.39	11.02	5.52	5.76	1.00	11.79	32.95
Unemployed	0.00	9.41	16.65	9.41	7.24	0.00	0.00	16.65
Other	10.64	5.25	8.38	0.00	12.97	3.64	3.13	36.29
Homeownership status								
Owner of house	18.66	3.01	34.12	6.24	17.75	5.20	26.74	64.45
Owner of apartment	28.81	0.00	45.25	10.03	15.37	6.60	18.09	69.04
Renter of house or apartment	26.54	4.35	0.00	5.44	19.53	2.48	15.59	46.69
Residence in Turkish Cypriot property	15.70	6.85	0.00	0.00	0.00	10.07	21.46	39.80
Refugee house	17.75	10.15	0.00	3.93	22.13	1.97	29.13	51.29

Table 2A: Mean Value of debt holdings for households holding debt (2002 Cyprus pounds), 1999 survey

Household characteristic	Credit card balances	Other lines of credit	Home secured debt	Other residential property	Car loans	Educational loans	Other loans	Any debt
All households	1.021	1.009	24.084	33.982	6.675	11.979	9.202	20.457
Income per annum (2002 Cyprus pounds)								
5.000 or less	1.114	1.089	14.459	0	6.238	3.181	4.151	8.840
5.001-15.000	685	919	20.264	35.640	6.725	10.054	7.926	15.659
15.001-20.000	1.099	1.682	22.855	19.523	7.703	12.555	8.070	20.215
20.001-25.000	1.287	918	33.815	17.598	5.010	11.764	8.776	24.959
25.001-30.000	1.274	1.637	29.575	40.057	8.576	13.186	16.808	32.087
30.001-35.000	1.583	44	31.325	20.906	6.954	16.536	16.442	31.551
35.001-40.000	856	229	25.583	0	13.099	17.868	21.085	23.894
Over 40.000	1.412	109	27.701	150.409	4.767	11.471	16.339	42.081
Age of head (years)								
29 or below	850	2.473	25.315	37.796	8.404	6.610	13.103	17.880
30-39	599	886	25.955	21.196	5.533	2.305	7.501	19.853
40-49	1.300	1.056	22.101	35.230	5.352	13.955	10.091	22.422
50-59	1.061	783	25.896	20.266	9.504	12.145	9.956	19.900
60-69	999	463	18.803	211.671	7.122	10.514	4.198	20.981
70 or over	1.925	0	2.729	32.747	0	0	10.476	6.851
Current employment status of head								
Public employee	1.021	812	26.118	32.052	5.374	12.080	7.117	22.006
Private employee	1.020	1.536	22.031	43.585	7.135	13.072	10.846	20.136
Self-employed	865	545	26.158	31.789	6.618	12.319	9.006	19.979
Retired	1.376	1.813	25.364	28.391	7.651	7.536	7.487	20.785
Unemployed	617	214	13.172	10.916	5.458	9.460	15.616	16.040
Other	373	1.516	24.991	0	8.732	0	9.183	18.340
Homeownership status								
Owner of house	1.093	1.137	23.934	26.363	6.703	11.764	8.911	20.750
Owner of apartment	1.024	593	25.315	92.112	4.190	12.981	8.749	29.173
Renter of house or apartment	499	0	0	25.001	5.731	15.567	10.386	9.626
Residence in Turkish Cypriot property	0	327	0	0	0	0	17.009	11.437
Refugee house	587	353	0	1.419	8.688	12.627	10.551	10.615

Table 2B: Mean Value of debt holdings for households holding debt (2002 Cyprus pounds), 2002 survey

Household characteristic	Credit card balances	Other lines of credit	Home secured debt	Other residential property	Car loans	Educational loans	Other loans	Any debt
All households	1.442	684	28.194	41.402	4.663	15.530	9.505	24.586
Income per annum (2002 Cyprus pounds)								
5.000 or less	1.832	114	23.076	10.109	3.489	0	6.848	11.841
5.001-15.000	947	525	21.545	21.506	4.207	15.040	8.621	16.910
15.001-20.000	1.158	1.795	30.301	29.643	3.049	12.550	6.662	22.134
20.001-25.000	1.967	670	30.297	57.787	6.069	8.257	9.205	29.557
25.001-30.000	2.521	0	33.424	68.571	4.582	10.417	10.209	35.217
30.001-35.000	1.558	15	37.277	39.000	7.968	5.000	11.385	37.752
35.001-40.000	1.028	814	49.558	28.000	4.272	82.500	16.833	47.551
Over 40.000	2.875	235	46.749	139.573	6.193	18.973	29.142	75.131
Age of head (years)								
29 or below	996	100	22.038	36.150	3.140	0	6.220	13.242
30-39	1.689	272	29.736	34.863	5.409	5.000	11.617	27.449
40-49	1.410	719	28.669	32.339	3.888	14.770	7.489	24.661
50-59	1.625	1.504	28.989	28.974	5.687	18.259	11.838	27.830
60-69	1.241	259	24.595	139.161	3.744	5.752	9.969	30.455
70 or over	942	502	5.590	35.996	4.590	0	2.001	8.462
Current employment status of head								
Public employee	1.366	237	29.420	27.423	5.525	9.465	9.987	27.394
Private employee	1.562	510	25.802	37.926	4.344	11.304	9.912	22.301
Self-employed	1.578	2.250	31.977	77.818	4.641	40.835	9.489	29.946
Retired	971	151	24.599	24.962	4.639	6.818	7.018	16.256
Unemployed	0	240	25.000	35.000	110	0	0	44.966
Other	979	300	20.870	0	1.937	13.000	9.500	7.969
Homeownership status								
Owner of house	1.426	443	29.958	23.284	5.024	17.153	9.500	25.260
Owner of apartment	1.892	0	20.930	83.109	4.201	12.578	6.728	30.480
Renter of house or apartment	714	232	0	132.866	3.658	2.750	10.882	21.208
Residence in Turkish Cypriot property	1.424	40	0	0	0	7.361	1.975	3.496
Refugee house	1.338	1.510	0	17.874	3.177	16.500	12.722	11.361

Table 3A: Median Value of debt holdings for households holding debt (2002 Cyprus pounds), 1999 survey

Household characteristic	Credit card balances	Other lines of credit	Home secured debt	Other residential property	Car loans	Educational loans	Other loans	Any debt
All households	655	491	17.465	19.648	4.912	10.916	4.639	11.352
Income per annum (2002 Cyprus pounds)								
5.000 or less	546	1.092	13.099	0	5.458	3.602	415	4.585
5.001-15.000	546	273	15.282	18.556	4.366	12.007	4.912	8.732
15.001-20.000	982	1.637	18.556	19.648	6.549	10.916	3.002	12.553
20.001-25.000	1.092	1.092	21.831	16.373	4.803	9.824	6.004	15.282
25.001-30.000	1.092	1.637	19.648	27.289	6.549	10.916	8.187	19.648
30.001-35.000	1.092	44	25.584	21.831	3.820	12.007	10.588	24.724
35.001-40.000	1.092	229	32.747	0	13.099	16.373	21.831	27.725
Over 40.000	546	109	24.014	25.106	4.912	9.278	9.824	22.923
Age of head (years)								
29 or below	546	5.458	32.747	18.556	10.042	9.824	3.275	10.916
30-39	491	218	21.831	19.648	4.366	982	2.729	10.916
40-49	873	600	16.373	21.831	4.366	10.916	6.549	12.553
50-59	819	491	18.556	18.698	6.549	10.916	4.366	13.099
60-69	1.092	22	10.916	87.324	13.099	8.732	3.056	5.458
70 or over	1.637	0	2.729	32.747	0	0	27.289	2.729
Current employment status of head								
Public employee	873	1.092	20.739	21.831	4.366	10.916	3.820	12.553
Private employee	873	1.179	17.465	16.373	5.021	10.916	5.239	12.553
Self-employed	546	109	17.465	32.747	4.366	12.007	3.820	10.916
Retired	546	2.183	22.268	19.648	8.732	8.187	5.458	10.916
Unemployed	196	327	10.916	10.916	5.458	9.824	17.465	10.916
Other	382	2.183	32.747	0	8.732	0	21.831	11.461
Homeownership status								
Owner of house	655	600	17.465	19.648	5.021	10.916	4.640	12.553
Owner of apartment	764	928	19.648	32.747	4.912	16.373	4.366	18.512
Renter of house or apartment	437	0	0	43.662	3.056	29.068	4.366	2.390
Residence in Turkish Cypriot property	0	327	0	0	0	0	10.916.	10.916
Refugee house	437	491	0	1.419	4.803	17.465	4.912	4.912

Table 3B: Median Value of debt holdings for households holding debt (2002 Cyprus pounds), 2002 survey

Household characteristic	Credit card balances	Other lines of credit	Home secured debt	Other residential property	Car loans	Educational loans	Other loans	Any debt
All households	900	300	20.000	18.500	3.500	10.000	3.800	11.100
Income per annum (2002 Cyprus pounds)								
5.000 or less	1.540	100	9.000	10.000	2.500	0	3.800	3.787
5.001-15.000	600	400	15.000	13.000	3.500	13.000	2.906	9.000
15.001-20.000	500	945	26.000	23.500	2.300	13.000	5.000	14.300
20.001-25.000	940	500	20.000	24.000	4.500	5.750	3.000	16.500
25.001-30.000	1.300	0	23.000	100.000	5.000	12.000	3.000	24.000
30.001-35.000	1.400	15	29.500	40.000	5.560	5.000	4.000	29.000
35.001-40.000	1.000	814	40.000	29.000	5.000	150.000	20.000	25.000
Over 40.000	1.200	270	45.000	22.000	3.500	13.000	8.000	24.630
Age of head (years)								
29 or below	645	100	20.000	46.000	2.500	0	3.000	6.100
30-39	900	240	23.000	26.000	4.000	5.000	4.000	17.600
40-49	900	600	20.000	17.000	3.200	12.000	3.500	13.000
50-59	1.000	300	15.000	15.000	4.980	13.500	5.000	11.000
60-69	1.100	400	12.000	5.000	3.500	5.000	3.500	5.500
70 or over	500	100	5.000	30.000	5.000	0	1.300	2.000
Current employment status of head								
Public employee	650	150	23.000	24.000	4.300	8.000	4.000	18.480
Private employee	1.000	600	18.000	17.000	3.300	10.000	4.000	11.000
Self-employed	940	2.000	22.000	24.000	4.000	36.800	5.200	10.000
Retired	600	100	15.000	20.000	4.000	10.000	3.000	5.500
Unemployed	0	240	35.000	35.000	110	0	0	70.240
Other	1.500	300	35.000	0	1.300	13.000	9.500	1.600
Homeownership status								
Owner of house	900	300	20.000	15.000	4.000	10.000	4.000	12.000
Owner of apartment	1.000	0	18.000	35.000	4.000	10.000	3.000	17.000
Renter of house or apartment	600	200	0	200.000	1.600	5.000	1.550	1.550
Residence in Turkish Cypriot property	1.800	40	0	0	0	10.000	1.500	2.000
Refugee house	940	500	0	11.000	3.500	13.000	3.000	6.000

Table 4A: Household debt composition (%), by selected characteristics of households, 1999 survey

Household characteristic	Credit card balances	Other lines of credit	Home secured debt	Other residential property	Car loans	Educational loans	Other loans	Any debt
All households	1.60	0.29	56.38	13.16	3.20	6.72	18.65	100.00
Income per annum (2002 Cyprus pounds)								
5.000 or less	3.54	1.95	64.57	0	6.89	2.70	20.36	100.00
5.001-15.000	1.36	0.35	56.29	10.70	4.58	3.85	22.87	100.00
15.001-20.000	1.18	0.26	58.99	12.30	1.80	9.40	16.08	100.00
20.001-25.000	2.28	0.35	70.25	4.16	2.73	7.23	12.99	100.00
25.001-30.000	1.75	0.03	45.79	24.39	2.85	5.21	19.98	100.00
30.001-35.000	1.44	0.00	55.97	8.74	3.30	12.06	18.49	100.00
35.001-40.000	2.11	0.05	57.12	0	5.25	14.40	21.07	100.00
Over 40.000	1.45	0.00	34.12	39.27	1.30	5.62	18.23	100.00
Age of head (years)								
29 or below	1.58	0.89	51.89	9.78	2.15	1.85	31.86	100.00
30-39	0.98	0.18	71.82	9.44	2.64	0.17	14.77	100.00
40-49	2.06	0.30	54.64	13.63	2.59	6.49	20.27	100.00
50-59	1.19	0.24	49.27	7.35	5.58	16.81	19.56	100.00
60-69	1.65	0.25	25.42	51.25	2.47	9.80	9.16	100.00
70 or over	21.68	0.00	5.02	48.91	0.00	0.00	24.38	100.00
Current employment status of head								
Public employee	1.49	0.25	60.41	16.26	2.30	6.03	13.26	100.00
Private employee	1.55	0.35	49.79	13.10	3.70	9.18	22.34	100.00
Self-employed	1.39	0.14	57.09	10.46	3.56	6.49	20.88	100.00
Retired	2.55	0.36	61.03	16.03	3.13	3.47	13.43	100.00
Unemployed	1.02	0.24	53.52	2.68	1.73	5.02	35.78	100.00
Other	0.42	0.98	86.45	0.00	3.88	0.00	8.27	100.00
Homeownership status								
Owner of house	1.63	0.32	61.05	10.07	3.11	6.92	16.89	100.00
Owner of apartment	1.36	0.05	49.00	32.92	1.04	3.90	11.72	100.00
Renter of house or apartment	2.70	0.00	0.00	24.87	5.16	8.38	58.90	100.00
Residence in Turkish Cypriot property	0.00	0.96	0.00	0.00	0.00	0.00	99.04	100.00
Refugee house	1.27	0.41	0.00	0.26	17.24	15.14	65.69	100.00

Table 4B: Household debt composition (% by selected characteristics of households, 2002 survey)

Household characteristic	Credit card balances	Other lines of credit	Home secured debt	Other residential property	Car loans	Educational loans	Other loans	Any debt
All households	1.92	0.15	54.80	17.22	5.33	5.08	15.51	100.00
Income per annum (2002 Cyprus pounds)								
5.000 or less	4.92	0.15	48.83	9.85	7.83	0.00	28.42	100.00
5.001-15.000	1.71	0.16	55.59	10.84	6.24	6.47	18.99	100.00
15.001-20.000	1.66	0.43	66.90	12.47	3.53	3.88	11.13	100.00
20.001-25.000	2.86	0.09	57.79	15.60	7.80	2.60	13.27	100.00
25.001-30.000	2.40	0.00	55.41	22.10	2.95	2.88	14.26	100.00
30.001-35.000	1.72	0.00	60.34	17.22	7.62	2.21	10.89	100.00
35.001-40.000	0.39	0.06	50.41	13.91	4.65	23.42	7.17	100.00
Over 40.000	0.95	0.02	31.67	43.82	1.53	3.45	18.56	100.00
Age of head (years)								
29 or below	3.33	0.01	52.88	18.54	9.03	0.00	16.21	100.00
30-39	2.48	0.05	60.39	9.29	6.75	0.09	20.96	100.00
40-49	1.62	0.15	61.93	13.47	3.86	6.26	12.71	100.00
50-59	1.23	0.28	50.66	14.65	5.77	12.97	14.45	100.00
60-69	1.78	0.04	27.23	57.66	1.61	1.97	9.71	100.00
70 or over	1.88	2.02	6.92	77.66	5.68	0.00	5.83	100.00
Current employment status of head								
Public employee	1.83	0.04	61.50	11.93	5.15	4.64	14.90	100.00
Private employee	2.38	0.11	54.76	13.91	6.00	3.66	19.19	100.00
Self-employed	1.46	0.31	49.21	24.36	4.72	8.03	11.93	100.00
Retired	1.86	0.09	50.63	25.71	4.99	1.27	15.45	100.00
Unemployed	0.00	0.30	55.60	43.99	0.11	0.00	0.00	100.00
Other	3.60	0.54	60.49	0.00	8.69	16.38	10.30	100.00
Homeownership status								
Owner of house	1.63	0.08	62.80	8.93	5.48	5.48	15.60	100.00
Owner of apartment	2.59	0.00	45.01	39.60	3.07	3.95	5.78	100.00
Renter of house or apartment	1.91	0.10	0.00	72.94	7.21	0.69	17.14	100.00
Residence in Turkish Cypriot property	16.06	0.20	0.00	0.00	0.00	53.28	30.45	100.00
Refugee house	4.07	2.63	0.00	12.04	12.07	5.59	63.60	100.00

Table 5: Participation rates in various types of debt: comparison of the US SCF and the CySCF (percent)

Type of debt	SCF 1998	CySCF 1999	SCF 2001	CySCF 2002
Home secured debt	43.10	29.95	44.6	29.77
Other residential property	5.10	4.96	4.7	6.37
Installment loans	43.70	NA	45.2	NA
Credit card balances	44.10	20.11	44.4	20.37
Other lines of credit	2.30	3.62	1.5	3.39
Car loans	NA	6.13	NA	17.62
Educational loans	NA	7.18	NA	5.01
Other loans⁽¹⁾	8.80	25.94	7.2	24.99
Any debt	74.10	63.14	75.1	62.29

Sources: 1998 and 2001 SCF, and 1999 and 2002 CySCF.

⁽¹⁾ The definition of 'other loans' differs between the SCF and the CySCF. Specifically, in the SCF 'other loans' refers to total debt minus home secured debt, other residential property, instalment loans, credit card balances and other lines of credit. However, in the case of the CySCF, 'other loans' refers to total debt minus home secured debt, other residential property, credit card balances, other lines of credit, car loans and educational loans.

Table 6: Debt composition: Comparison of the US SCF and the CySCF (percent)

Type of debt	SCF 1998	CySCF 1999	SCF 2001	CySCF 2002
Home secured debt	71.3	55.85	75.1	54.80
Other residential property	7.7	13.04	6.4	17.22
Installment loans	13.0	NA	12.3	NA
Credit card balances	3.9	1.59	3.4	1.92
Other lines of credit	0.3	0.28	0.5	0.15
Car loans	NA	3.17	NA	5.33
Educational loans	NA	6.66	NA	5.08
Other loans⁽¹⁾	3.7	18.48	2.3	15.51
Total	100	100	100	100

Sources: 1998 and 2001 SCF, and 1999 and 2002 CySCF.

⁽¹⁾ The definition of 'other loans' differs between the SCF and the CySCF. Specifically, in the SCF 'other loans' refers to total debt minus home secured debt, other residential property, instalment loans, credit card balances and other lines of credit. However, in the case of the CySCF, 'other loans' refers to total debt minus home secured debt, other residential property, credit card balances, other lines of credit, car loans and educational loans.

**Table 7: Outstanding mortgage debt as a percentage of GDP:
Comparison between Cyprus and EU members(percent)**

	Outstanding mortgage debt (% of GDP)		Home ownership (%)
	1995	2003	2002
Cyprus	29 ⁽¹⁾	31 ⁽²⁾	83
Belgium	21	28	71
Denmark	45	54	42
Greece	4	14	83
Spain	17	32	85
France	20	23	55
Ireland	24	37	77
Italy	8	11	80
Luxembourg	25	18	n/a
Netherlands	48	79	53
Austria	5	4	56
Portugal	18	49	64
Finland	32	32	58

Sources: European Mortgage Federation, ECB (2003), Debelle (2004), CySCF1999 and CySCF2002.

⁽¹⁾ 29% refers to the outstanding mortgage debt as a percentage of GDP in 1998 and not 1995. It is calculated by multiplying mean home secured debt at current prices in 1998 (CY£22.064) by the participation rate in home secured debt in 1998 (0.2995) and by the total number of households in the economy in 1998 (211.700) and then dividing by GDP at current prices in 1998 (CY£4.862.800.000).

⁽²⁾ 31% refers to the outstanding mortgage debt as a percentage of GDP in 2001 and not 2003. It is calculated by multiplying mean home secured debt at current prices in 2001 (CY£28.194) by the participation rate in home secured debt in 2001 (0.2977) and by the total number of households in the economy in 2001 (223.790) and then dividing by GDP at current prices in 2001 (CY£6.103.600.000).

Table 8: Total outstanding debt as a percentage of GDP: comparison between Cyprus the euro area and other countries

percent

	1998	2004
Cyprus	52 ⁽¹⁾	56 ⁽²⁾
Denmark	91	108
UK	72	101
Australia	52	85
US	66	84
Euro Area	46	55

Sources: ECB, Australian Bureau of Statistics, Reserve Bank of Australia (RBA), Bureau of Economic Analysis, Federal Reserve, Bank of England, Danmarks National bank, CySCF1999 and CySCF2002.

⁽¹⁾ This is obtained by multiplying the mean value of 'any debt' at current prices in 1998 (CY£18.741) by the participation rate in any debt in 1998 (0.6314) and by the total number of households in the economy in 1998 (211.700) and then dividing by GDP at current prices in 1998 (CY£4.862.800.000).

⁽²⁾ 56% refers to total outstanding debt as a percentage of GDP in 2001 and not 2004. It is calculated by multiplying the mean value of 'any debt' at current prices in 2001 (CY£24.586) by the participation rate in any debt in 2001 (0.6229) and by the total number of households in the economy in 2001 (223.790) and then dividing by GDP at current prices in 2001 (CY£6.103.600.000).