The Property Regime & Property Markets under Annan V[#]
Preliminary Findings Paper

By

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ABSTRACT

The purpose of this research is to carry out a thorough examination of the technical apparatus proposed by the fifth and final version of the Annan Plan for resolving the property aspect of the Cyprus Problem, in order to examine, ultimately, under what conditions the proposed property regime would be viable. We base our analysis on (a) the recent economic and property market performances on each side of the island, using a unique database of property prices both in the north and south; (b) current property market and convergence theory; and (c) four different scenarios of property price-growth to test the viability of the Property Board. This enables us to draw conclusions, for the first time, on the economic viability of the property provisions of Annan V, based on the real current property market dynamics. According to our preliminary results we find that, despite *de facto* barriers to international trade, tourism and investment in the north, both incomes per head and property prices already appear to be converging very fast with the south: land prices have risen by 172% in two years and housing unit prices by 36%. We also find that property prices would be subject to both negative and positive price pressures if Annan V were implemented. However, the process of property price and economic convergence would continue, even under conditions of some restrictions in investment. We find that under the most pessimistic convergence scenario (price convergence in 30 years), the Property Board would be insolvent by year 25. Under the second scenario (convergence within 25 years), the Property Board would accumulate total net cash of around CYP 4 billion (available for distribution to the holders of Property Appreciation Certificates) by year 35, but would have a negative net present value of CYP 61 million (once the cost of money is taken into account). Under Scenario 3 (convergence within 15 years), the Property Board would accumulate a total net cash of CYP 21 billion (Net Present Value of CYP 1.7 billion) by year 35. Finally, under the optimistic Scenario 4 (convergence within 10 years), the Property Board would accumulate total net cash of CYP 36.6 billion (Net Present Value of CYP 3.4 billion) by year 35.

The views expressed in this paper belong to the authors only and do not necessarily correspond to those of PRIO or of S. Platis ECONOMIC RESEARCH. None of the wording used or references made in this paper implies recognition of any internationally unrecognized authority. The terms "SOUTH" and "NORTH" are used for simplicity to refer respectively to the "areas of the Republic of Cyprus in which the Government of the Republic of Cyprus exercises effective control" and the "areas of the Republic of Cyprus in which the Government of the Republic of Cyprus does not exercise effective control" as defined in Protocol 10 to the 2003 Act of Accession.

[#] The research has been initialized and sponsored by the PRIO Cyprus Centre as part of a larger project studying different aspects of the property issue in Cyprus. The PRIO Project Coordinator for this research is Ayla Gurel. For further information about PRIO, visit www.prio.no.
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A. PURPOSE AND APPROACH

Property is one of the most emotive of issues in conflict resolution, and Cyprus is no different in this respect. At the same time, the search for a balance between two potentially conflicting aims: bizonality and bicommunality on the one hand (implying two zones, each administered and largely inhabited by one community), and international law and human rights on the other (implying no restrictions on the free movement of persons and recognition of persons' rights to their properties, but at the same time consideration for the rights of those living in property that belongs to someone else), means that the property provisions of any proposed solution to the Cyprus problem will inevitably be complex.

This paper presents the **preliminary findings** of a longer research paper, which aims to carry out a thorough examination of the technical apparatus of the regime proposed in the fifth and final version of the UN Plan for a Comprehensive Settlement of the Cyprus Problem (Annan V) for resolving the property aspect of the Cyprus problem. In doing so, neither this nor the longer research paper considers the property regime of Annan V from its human, legal or political angle. We attempt, instead, a “technical economic analysis” of the Annan V provisions on property, which includes an analysis of the functioning of the macroeconomic and property markets and the resulting economics of the ‘Property Board’ as described in Annan V.

This analysis has been undertaken recognising that the Greek Cypriot community exercised its democratic right to reject Annan V at the simultaneous referenda held on April 24th 2004, and thus the plan, along with its property regime, will not emerge again as it is. However, the problem vis-à-vis the property question and its effect on economic performance remain. Thus, in order to understand the dynamics of convergence and property markets under any solution that may be proposed in future, it is important first to understand how property markets would operate under a scenario that has already been set out in great detail - that of Annan V.

In fact, among the many and complex reasons for the Greek Cypriot ‘No’ to Annan V were concerns about the property aspects of the proposed plan and what was perceived as its unpredictable impact on a reunited economy. Studies that were produced—mainly on the basis of the third version of the Annan Plan (Annan III)—conflicted in their conclusions, sometimes very widely. Moreover, given that there were only three weeks between the publication of the final version of the proposed plan (Annan V) and the referenda themselves, no comprehensive study was ever produced to assess the impact on the property market of Annan V, which in its plans for property restitution and compensation differed in some important aspects from Annan III. The absence of any comparative study on the property markets in the northern and southern parts of Cyprus, and the fact that most of the Annan III studies took a “static” approach—not taking into account the important impact of convergence—only compounded the confusion that has surrounded the issue among people in both communities.

This paper seeks to redress this situation, in sum, by:

(a) Evaluating the current and recent performance of the macroeconomies on each side of the island.
(b) Evaluating current and recent property price behaviour on each side of the island. In order to do this, we have compiled the most comprehensive and unique database of property prices on both sides of the island to date. This has allowed us to compare price developments in the north and south for both land and housing units over a two-year period (2003-2005).
(c) Analysing the factors that would affect economic convergence (a key determinant of property price behaviour), macroeconomic performance and property market behaviour according to current economic theory.
(d) Through the application of these theories, examining the possible positive and negative pressures on property prices in a post-solution situation.
(e) Analysing the property-price conditions under which the Property Board, under Annan V, would be profitable and under which conditions it would be insolvent, through four different price-growth scenarios.

This enables us to draw conclusions, for the first time, on the economic viability of the property provisions of Annan V, based on the real current property market dynamics.

Thus, we hope that our research can be used as a basis for moving beyond Annan V. Furthermore, we believe that now is the time also to begin similar investigations to identify the most favourable conditions for fiscal policy, monetary policy, macroeconomic policy and property policy under which a bizonal, bicommunal, federal state could thrive on a sustainable basis for the benefit of all Cypriots.

B. METHODOLOGY FOR DATA COLLECTION (REAL ESTATE DATA)

Perhaps one of the most important parts of our research work relates to the use of the unique database of property prices, which includes both houses and land from both parts of the island. This enables us to draw, for the first time, fact-based empirical conclusions on property price trends on both sides of the island and to base our assessment of the property provisions of the Annan V on the real dynamics of the relevant property markets.

The real estate database includes asking price data on housing units and land for 2003, 2004 and the first half of 2005. We collected data on asking prices, rather than transaction (sales) prices obtained from land registry records, for two reasons. First, asking prices provide a much more up-to-date picture of the property market than any information available from land registries, where there is a long time-lag between the transaction taking place and its appearance in the land-registry records. Second, land-registry data can be problematic from a methodological point of view, given the practice of some sales prices being under-reported for tax purposes.

For real estate prices in the south, we collected data from the database of BuySell Cyprus Real Estate, the largest real-estate-related company that specializes in advertising property in the southern part of the island. BuySell Cyprus Real Estate granted us limited access to two large databases (the biggest on the island) on asking prices: one for housing units, containing over 7000 entries, and one for land, containing around 1700 entries. For real estate prices in the north, we gathered over 1000 advertisements for housing units and just under 300 advertisements for land, published in newspapers in the north: *Kıbrıs*, *Afrika*, and *Cyprus Today*. In order to collect a representative sample, the search for both north and south covered five six-months periods between January 2003 and June 2005[1].

Kıbrıs is the largest Turkish Cypriot newspaper in terms of circulation, while *Afrika* was selected because it hosts free-of-charge advertisements in special sections submitted by private persons. The fact that the advertisements are free of charge means that it is able to attract a large number of submissions. This made possible the collection of data from a rather large sample, despite the relatively small size of the property market in the north. *Cyprus Today*, a weekly English-language newspaper, was also selected because it attracts a considerable number of advertisements for villas and other housing units in tourist areas.

After cleaning the data to exclude significant outliers, repeat advertisements and other anomalies such as lack of full descriptive information regarding the property, the final sample was condensed to a total of 1619 land entries and 6215 housing entries for the property market in the south and 203 land entries and 507 housing entries for the property market in the north.

C. PRELIMINIARY FINDINGS FROM OUR DATA ANALYSIS

1. Macroeconomic convergence is already occurring

The macroeconomies on both sides of the island seem to be already converging, despite the *de facto* barriers to foreign investment that exist in the north. Within just three years, incomes in the north have converged with incomes in the south by almost ten percentage points: gross national income (GNP) per capita at current prices in the economy in the north rose from 31.4% of the average in the south in 2002 to 41.3% of the average in the south in 2004. In the ten-year period 1995-2004, the same ratio was only 34.3%.[2]

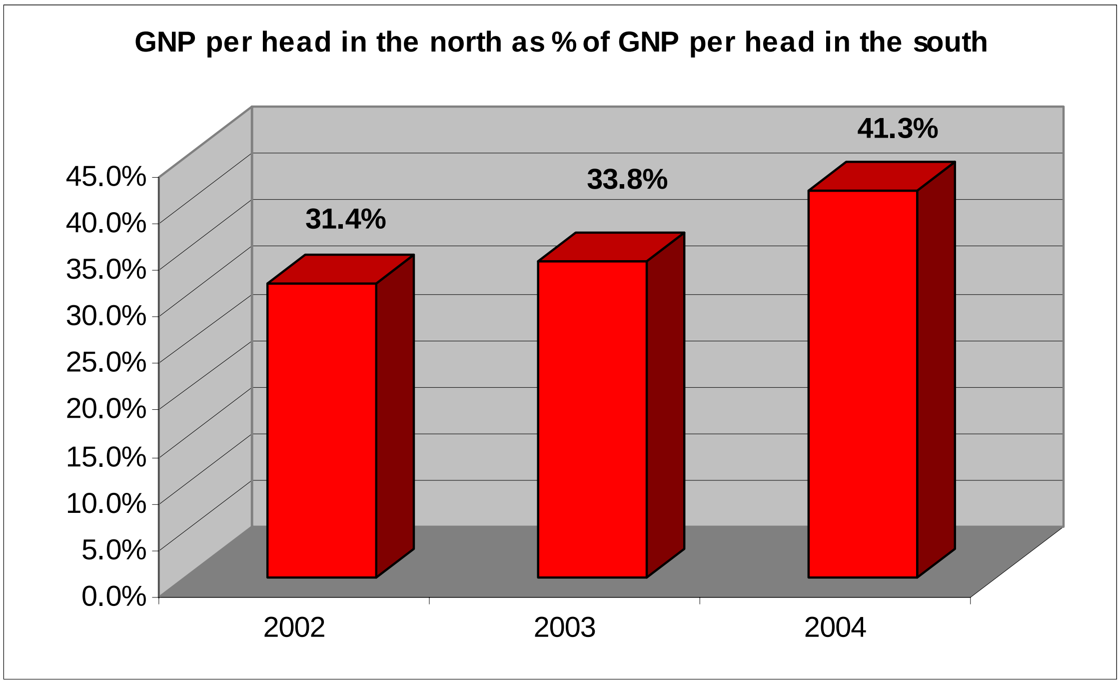
The catch-up can be witnessed also by the respective growth rates. The economy in the north has been growing much faster than the more mature economy in the south, and especially so since 2002: the year after the Turkish lira was devalued. Average real GNP growth in the north was 9.3% in 2002-04, compared with only 3.6% in the south. In the ten-year period 1995-2004 average real GNP growth was 4.4% in the north, compared with 3.6% in the south.

2. Property markets are also beginning to converge

Based on our data analysis, we have found that there is still a significant gap in property values between north and south. On average and over the five half-year periods of our analysis, asking prices for housing units in the north were 42.5% of prices in the south, while asking prices for land were only 17.1% of prices in the south.

[1] Data in the northern part of Cyprus was compiled by Ms. Özlem Yöncü, graduate student at the Economy Department of the Eastern Mediterranean University.

[2] GNP per head in the north did briefly surpass 40% of the 2000 average in the south, but unlike in 2003-04, this was entirely a function of an overvalued exchange rate and it did not last. The Turkish lira was devalued in early 2001 and GNP per head dropped to 34.4% in the same year.

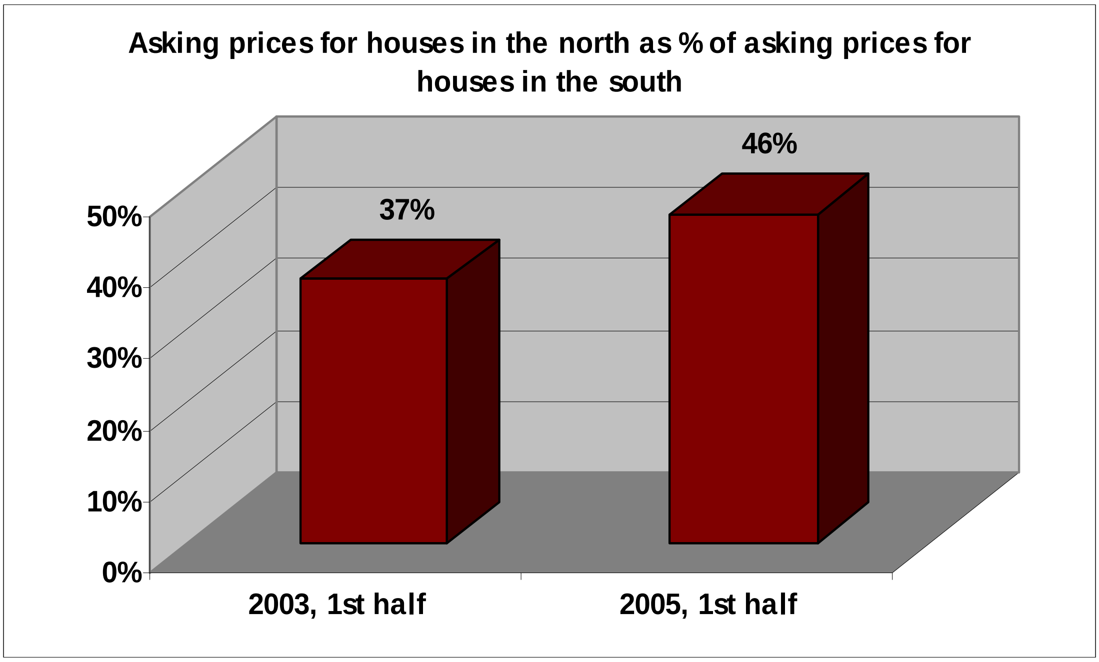


Graph 1. Comparison of Gross National Product.

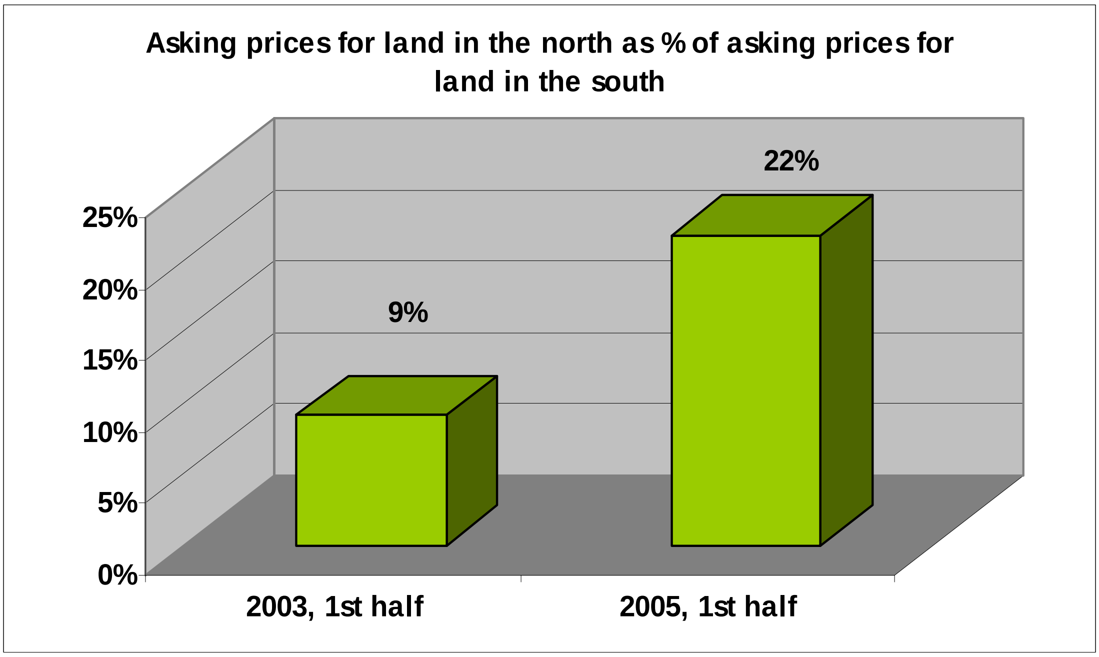
MACROECONOMIC PERFORMANCE	2000	2001	2002	2003	2004	2002-2004	1995-2004
Real GNP growth (%)[a]							
South	2.5	4.6	3.4	3.4	3.8	3.6	3.6
North	-0.6	-5.4	6.9	11.4	9.6	9.3	4.4
GNP per head (CYP)[a,b]							
South	7,658	8,172	8,525	9,046	9,361	8,977	7,653
North	3,157	2,811	2,677	3,055	3,869	3,201	2,645
as % of South	41.2	34.4	31.4	33.8	41.3	35.5	34.3
Real GDP growth (%)[c]							
South	5.0	4.1	2.1	1.9	3.7	2.6	3.7
North	0.0	-5.4	6.2	10.6	10.3	9.0	4.7
GDP per head (CYP)[b,c]							
South	8,142	8,651	8,908	9,317	9,632	9,286	7,879
North	3,157	2,807	2,656	3,008	3,784	3,149	2,621
as % of South	38.8	32.4	29.8	32.3	39.3	33.8	33.0

[a] 2004 GNP data are Economist Intelligence Unit (EIU), Cyprus Country Report, Sep 2005 estimates.
[b] Per head data derived from respective statistical office population figures.
[c] 2004 GDP data are authors' estimates.

Sources: ROC Statistical Service, Planning Organisation of the administration in the north.

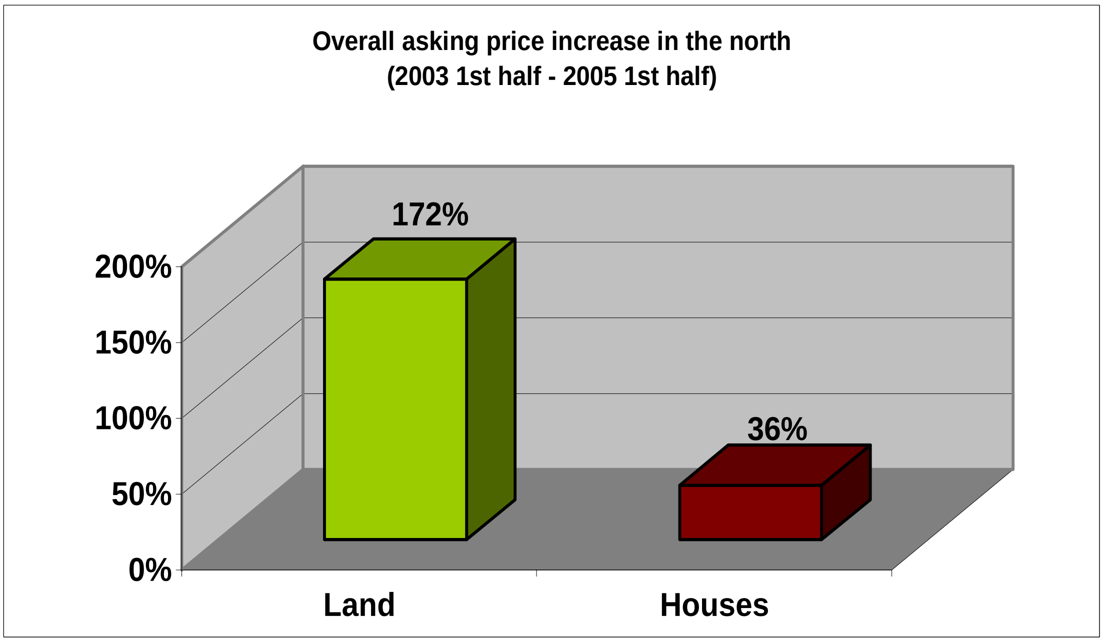


Graph 2. Asking prices for housing units: relationship between the two property markets.

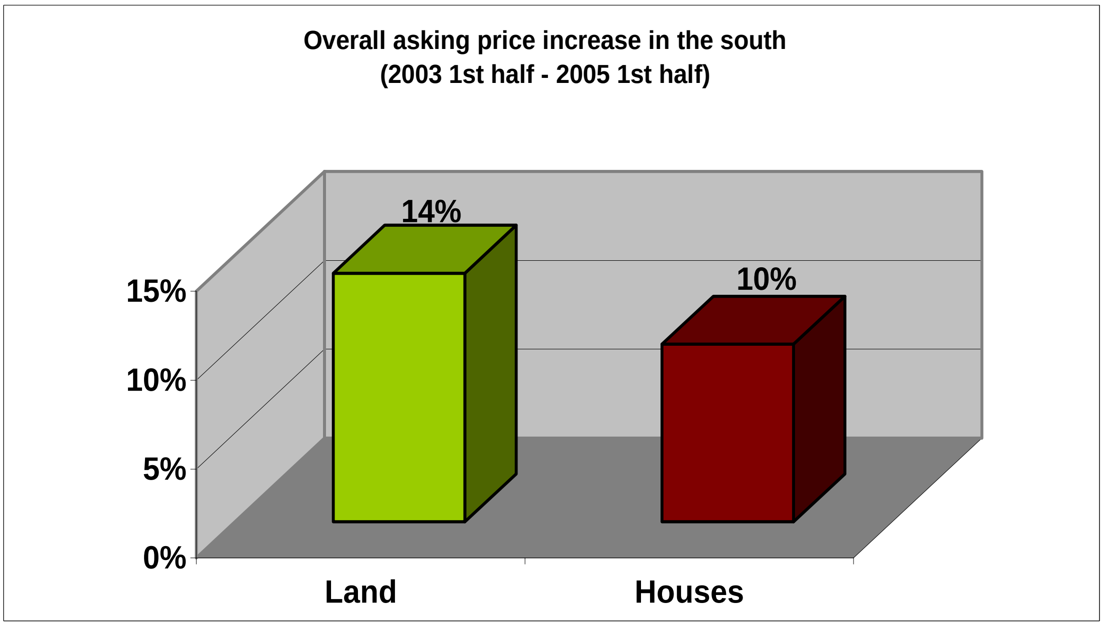


Graph 3. Asking prices for land: relationship between the two property markets.

However, prices already seem to be converging fast. During the period January 2003 to June 2005, prices per square metre rose much more quickly in the north than in the south. Land prices in the north rose by a remarkable 172% within two years, from CYP 5.07 per square metre to CYP 13.76, whereas land prices in the south rose by just 14%, from CYP 55.90 to CYP 63.55. As for housing units, prices in the north rose by 36% in two years, from an average CYP 336.96 per square metre to CYP 459.93, whilst in the south, housing unit prices rose by just 10%, from CYP 910.07 per square metre to CYP 996.82. Important factors that contributed to the increase of property prices in the north are the rising incomes of Turkish Cypriots, an increase in foreign demand for holiday houses in the north and the recent relative stabilisation of the (New) Turkish Lira vis-à-vis the pound Sterling.[3]



Graph 4. Property market performance in the north.



Graph 5. Property market performance in the south.

[3] Prices in the property market in the north are priced in pounds Sterling rather than in Turkish Lira.

D. PRELIMINARY CONCLUSIONS

Recent macroeconomic developments on both sides of the island, rapid property price-growth in the north (even under the present legally limiting and therefore distorted market), as well as the current theories on property markets and convergence, point to a number of conclusions about the direction of house prices under the regime of Annan V. There is no doubt that negative as well as positive price forces will emerge in the markets, the combination of which will determine the path of convergence of the two presently separate property markets and will finally determine the success or failure of the proposed property regime and of the Property Board.

The importance of this analysis lies in the fact that if the property market post-solution does not function properly (i.e. real estate prices do not rise in the medium to longer term), then the Property Board will not be able to pay out (the nominal) compensation by selling property transferred to it. Thus, first we carefully examine the negative price pressures on the market and any mitigating factors and then we examine the positive price pressures.

1. NEGATIVE PRICE PRESSURES AND RISKS

The downward price pressures and cash-flow risks include potential market restrictions in the north, oversupply of property and the risk of compensations exceeding market values significantly. These factors fuelled the fears and concerns expressed in the literature that the Property Board would collapse, through its inability to pay out the calculated compensations.

1.1 Potential restrictions on investment

The right, as stipulated in Annan V, of the Turkish Cypriot State to impose restrictions "in a non-discriminatory manner" on ownership by non-residents of that constituent state, if indeed implemented, would have a negative impact on prices by locking out wealthier investors from outside the constituent state: non-nationals and non-resident Greek Cypriots and Turkish Cypriots. This is probably one of the most serious downside risks to prices, given the lower purchasing power in the Turkish Cypriot community and the small size of the market.

1.2 Increase in property supply

As it has been pointed out in studies on Annan III, negative pressure on prices would come from a significant increase in the supply of property, albeit a gradual one. Obviously, the greater the supply, the more choice buyers have, therefore the lower the price they are willing to pay. The increase in supply would come from three main sources.

- **First**, from property returned over 3.5 years to Greek Cypriots in the *areas subject to territorial adjustment* such as Famagusta—affecting around half of displaced Greek Cypriots. This would form part of the Greek Cypriot State post-solution. We estimate that, through reinstatement, around 469,000 donums of "new" property would enter the current market in the south over the 3.5-year period. This represents around 20% of the GreekCypriot-titled property currently in the area controlled by the Government of the Republic of Cyprus.

- **Second**, in *areas not subject to territorial adjustment*, a gradual increase in supply of property in the Turkish Cypriot State to Greek Cypriots, and of property in the Greek

Cypriot State to Turkish Cypriots, would come from the "*one-third rule*[4]". Overall, we estimate that after all the claims have been processed, 142,000 donums in the Greek Cypriot State could be reinstated to Turkish Cypriot owners and 401,000 donums in the Turkish Cypriot State could be reinstated to Greek Cypriot owners via the one-third rule.

- **Third**, the Property Board would hold title deeds corresponding to the 2/3rds not reinstated, in areas not subject to territorial adjustment. In addition, the Property Board would hold title deeds of all of the dispossessed owners who opt to receive full compensation, rather than opting for one-third return and two-thirds compensation. Based on these, we estimate that total property transferred to the Property Board could reach an estimated net total of 317,000 donums after probable title swaps. Since the Property Board would be free to sell such titles, this would obviously increase real estate supply over the period of operation of the Property Board significantly. We estimate this, in fact, to correspond to about one-quarter of the entire size of the property market in the north.

1.3 "Current values" significantly exceed market values

The maximum amount of compensation to be paid out in bonds was significantly reduced between Annan III and Annan V, since only 2/9ths of the value of property that would fall outside dispossessed owners' constituent state would be compensated in the form of bonds.[5] The main risk to the viability of the Property Board, therefore, would be if the Property Board had to pay more in the form of bonds than it could earn by selling titles: in short, if its liabilities significantly exceeded its assets.

Under Annan V, the Property Board would have been obliged to pay compensation in "current values" (in effect, an artificial value that assumes that the events of 1963-64 and 1974 had never occurred) but would sell titles at market value (the price a buyer is prepared to pay based on market forces). Thus, if the "current values" of properties are estimated to be at a level significantly higher than market values, then the Property Board could see its liabilities exceeding its assets. In fact, based on our analysis, we find that apart from Kyrenia (in the north), where values appear to be converging with the south very fast, "current values" elsewhere in the north could conceivably exceed market values.

1.4 "Boom-bust" of bonds and Property Appreciation Certificates

A final downside risk for property prices comes from the demand side. This could occur if there were a "boom-bust" scenario, under which a speculative secondary market for bonds and Property Appreciation Certificates took off. In this case, the prices of such assets could rise beyond their real value (that is, faster than the rise in the value of properties as a whole) before finally crashing as holders realise that the assets are worth less than they paid for them. Much as such a stock market crash that began in Cyprus in late 1999 produced a negative wealth effect and eventually dampened overall demand, a similar crash in bond and property appreciation certificates would dampen demand for real estate and thus have a negative impact on prices.

[4] The right of restitution of dispossessed owners of at least one dwelling and one adjacent donum of land and thereafter a maximum of *one-third of the value and area* of their total ownership.

[5] Barring some exceptions, one-third (3/9ths) of total ownership is returned. Of the remaining two-thirds (6/9ths), one-third of the remainder (i.e. 2/9ths) is in the form of compensation bonds and two-thirds (i.e. 4/9ths) is in the form of "property appreciation certificates".

2. MITIGATING FACTORS

The abovementioned negative price pressures, in fact, are not equal in weight and effect. A number of factors also have the potential to limit the impact of these negative price pressures and have to be considered and critically evaluated in combination with the above. We list such factors below as “mitigating factors”.

2.1 Turkish Cypriot State authorities’ behaviour

In view of the recent boom in sales of tourist real estate to foreigners in the north, one has to question whether the right to restrict property sales to non-residents would ever be exercised in practice, at least for prime tourist real estate. Under the provisions of Annan V, any restrictions on ownership have to be exercised in a “non-discriminatory” manner, meaning that if the Turkish Cypriot State wanted to keep out Greek Cypriot investors, it would have to keep out all non-resident investors (including Turks and non-resident Turkish Cypriots) too. There could be few restrictions in practice on projects that would increase the value of the tourism product. Foreign investment in developments to boost the higher education sector, which is now an important source of foreign exchange in the north, could also be excluded from restrictions.

2.2 The impact of locational characteristics

The literature has shown that a market is only created where the supply of land and housing is of the right "type"—crucially, if it has desirable location characteristics, such as being close to tourist areas or infrastructure, or if it can be cultivated. Property in a bad location is effectively out of the market, because there is no demand for it. In simple terms, it is possible that only the most desirable additional donums of property “added” to the market in the Greek Cypriot State during the reinstatement process would have a negative impact on prices in high price locations, such as Paphos, for example, and that this would be a small proportion in terms of value of the total. This would therefore limit the impact of an increase in supply.

2.3 Supply increase could be limited

Restitution and compensation takes place over several years and the Property Board is mandated in Annan V to dispose of properties in a “prudent” manner. Therefore it is questionable whether the Property Board would dispose of properties all at once, under normal conditions. Moreover, to a certain extent the property in northern Cyprus to be returned is already *de facto* “in the market”, therefore the impact of a supply shock would be limited, at least to some degree. Based on our scenario and calculations, the Property Board could in fact introduce annually only about 2% of today’s market value of properties in the north (CYP27.3 million / CYP1.22 billion = 2.24%)[6] (compared to about 9% of value of the market sold in the south annually, at present).

2.4 How “current values” are set

The “current values” would be set by the Property Board itself, albeit with assistance from professionals. This no doubt could also act as an important safety valve, given the vagueness inherent in the definition of the current value calculations. It would be difficult for anyone to imagine a scenario under which the Property Board would set “current values” so high that would automatically make itself insolvent.

[6] The value of property introduced by the Property Board in the first year (CYP 27.3m) divided by our estimate of the market value of today's property prices in the north.

2.5 Where "current values" might be lower than market values

The abovementioned possibility of "current values" in the north exceeding market values also works the other way round. Before Cyprus was divided, Paphos was largely undeveloped and British second-home owners tended to flock to Kyrenia, whereas now they tend to flock to Paphos. Arguably, if Paphos property had had to compete for foreign buyers with Kyrenia (i.e. if the events of 1963-64 and 1974 had not occurred) market values in Paphos would be lower than they actually are today, which implies that "current values" in Paphos could be set at below market values. [7]

2.6 Convergence of property prices

Moreover, as outlined above, market values for property in the north (most of the compensation in "current values" would be paid for properties in the north) seem to be converging rapidly with market values in the south. If this pace of price-growth were to continue, "current values" would be unlikely to exceed market values.

2.7 The impact of financial regulation

The absence of detail on how any secondary market for bonds and Property Appreciation Certificates would be regulated means that the abovementioned boom-bust scenario is a longer-term risk that cannot be discounted. However, the impact of the more rigorous EU rules on financial markets that exist today could temper such risks.

3. POSITIVE PRICE PRESSURES

On the other hand, we would also expect upward pressures on prices. These would include some important (dynamic) factors on the demand side and additional factors on the supply side, especially in the north. These were not taken into account in much of the literature that analysed Annan III, which tended to analyze the property provisions on a static basis.

3.1 Legal certainty

Legal certainty has been shown in the literature to be one of the most important factors in raising demand and subsequently house prices. Indeed, in analysing property prices in the north, we clearly found evidence of a strong influence of a "legal uncertainty penalty" (of around 40%). It is not difficult to see that this is in fact much more acute in cases of property subject to territorial adjustment under Annan V (that is, property that would form part of the Greek Cypriot State under Annan V). This observation is underpinned by our finding that property price-growth decelerated significantly in northern Cyprus after the "Apostolides v. Orams case", whereby a Greek Cypriot dispossessed owner lodged a court case against a British couple who had built on his land.

3.2 Physical security and increased desirability

A related issue is physical security. Large areas of both urban and rural Cyprus lie along areas within sight of military guard posts or other military installations. This results in a feeling of insecurity for inhabitants (and especially possible foreign home-buyers) and thus limits the

[7] It is worth noting that under this scenario, dispossessed owners of property in Paphos would not "lose out" entirely, since the growth in the value of their Property Appreciation Certificates would be indirectly linked to the profits made by the Property Board from selling titles at a higher price (market value) than the amount it paid (in "current value").

value of properties in such areas. Combined with the ongoing removal of landmines, and assuming these posts, and other undesirable installations resulting from the current political situation, would be among the first to be removed, this would have a significant positive impact on the prices of properties in such areas. In addition, semi-collapsed buildings within the currently UN-controlled buffer zone may be repaired, increasing the desirability of adjacent areas.

3.3 Convergence of incomes

One of the most important positive price factors is the impact on demand of the apparent convergence of the incomes in the north with incomes in the south. Academic studies have shown that incomes are an important factor in determining land and house prices. Higher incomes lead to greater demand for higher value accommodation, for example. GNP per head in the north has already risen by almost 10 percentage points in three years, despite *de facto* barriers to international trade, tourism and investment. Following a solution, further and rapid rises in GNP should be expected, acting as positive pressure on prices.

3.4 Convergence of economies

Theory also points to the process of macroeconomic convergence accelerating, owing to the abovementioned legal certainty, physical security and the opening up of the economy on the north. Ports and airports would be opened to direct international traffic, businesses would enjoy improved access to credit from the more developed banking system in the south and possibly from banks in the north too. With the *de facto* adoption of the Cyprus pound (or euro from 2008), borrowers would enjoy cheaper credit than they can currently obtain for Turkish lira-denominated loans. Assisted mortgages as provided for in Annan V, investment in accommodation for the re-housed and, potentially foreign aid and foreign investment would also provide the basis for strong economic growth. The macroeconomic convergence would act as a strong catalyst towards faster convergence in the property markets as well.

3.5 The wealth effect of compensation

The wealth effect for all Cypriots created by: the restitution of all property to around half of Greek Cypriot refugees (allowing it to be sold or used as collateral for loans); part-restitution and compensation rights for the remaining half of Greek Cypriot refugees; and part-restitution and compensation rights for around half of all Turkish Cypriots, would act as an upward pressure mechanism on property prices.

3.6 Market reaction to price falls

Even if there were a sudden fall in prices, studies on other property markets have shown that, under normal market (and political) circumstances, potential sellers adopt a wait-and-see approach in such cases, until prices rise again. This is particularly the case with land held by individuals, rather than property developers —we estimate that only 10-15% of the land to be restituted will be developed within the first 3-4 years. We also know from the literature that in cases where property prices do fall, under normal political conditions, this is often short-lived, as speculators move in to snap up the bargains, thus pushing up demand and prices gain.

3.7 Relocation of Turkish Cypriots

Part of the population in the north would be relocated from the areas of territorial adjustment within the Turkish Cypriot State, creating demand for the alternative accommodation which, under Annan V, must be made available to them to purchase (through use of compensation bonds, Property Appreciation Certificates, personal funds or loans). This will of course increase the demand for land.

3.8 Planning authorities' behaviour and intervention
Another crucial factor is the influence of the planning authorities in approving applications to develop reinstated or newly purchased land (much of which is still largely undeveloped in the north). Research has shown that planning authorities can and do restrict the supply of residential or commercial land by limiting the conversion of agricultural land. Restriction of supply acts as a positive pressure on property prices.

E. PROPERTY BOARD SCENARIOS

Based on our data analysis describing the current situation in the north and south —which would be regarded as the initial state if Annan Plan V were implemented—we tested four convergence scenarios, based on four different paths of property price development in the north. Based on our preliminary conclusions above, these in turn, would finally determine the Property Board's financial status and the ultimate success or failure of the property regime under Annan V.[8]

All scenarios are based on some common initial parameters and assumptions, outlined below :
1. The total value of the property to be compensated would be CYP 4.55 billion[9] (after property exchanges).
2. The compensation is distributed according to the provisions of Annan V, resulting in a net issue of CYP 1.52 billion in bonds and CYP 3.03 billion in Property Appreciation Certificates (PAC).
3. Holders of bonds receive 10% annual coupon (interest) payments.
4. The "current values" of properties are calculated by increasing the reported market values in 1974 of the residual properties in the north (as given by the Planning Bureau) by 684.79% (reflecting an average yearly appreciation rate of 8% of properties in the southern part of Cyprus in the period 1978-2005).
5. Property prices in the north begin from today's market levels (as calculated in our data analysis). That is, properties in the Turkish Cypriot State are valued at 20% of properties in the Greek Cypriot State.[10]
6. The Property Board would avoid flooding the market with property and would sell the properties gradually: the Property Board would dispose of 3% of its holdings (in value) every year, so that in 35 years it will have no more properties to dispose of.
7. Prices growth rates in the south are kept at 3% (real) on average over the period under investigation (compared to an average of around 8% (nominal) over the period 1978-

[8] In our analysis we have not taken into account the CYP 100 million the Property Board would receive from the federal government upon its foundation, nor have we included in our calculations any administration and operation expense for the Property Board.
[9] The cost of compensation under Annan V was significantly reduced compared with Annan III. We base our estimate on studies by Symeon Matsis and then inflate to reach 2005 prices. (Symeon Matsis, *The cost of Compensations for the non-Reinstated Properties based on the Annan Plan*, March 2004).
[10] Although as related above, housing unit prices in the north are greater than 20% of the south, we used the proportions relating to land prices, since they represent the larger proportion of real estate.

2003), each time[11]. Following our previous analysis, this figure is based on an assumed supply shock in the south.

Overall, we assume that the political situation would be at least stable, although some initial mistrust can be assumed without any loss in our results.

Based on the above, we have calculated 4 different scenarios based on the how quickly prices in the two markets would converge: 30 years, 25 years, 15 years and 10 years. The variable in this case is the price growth rate in the north.

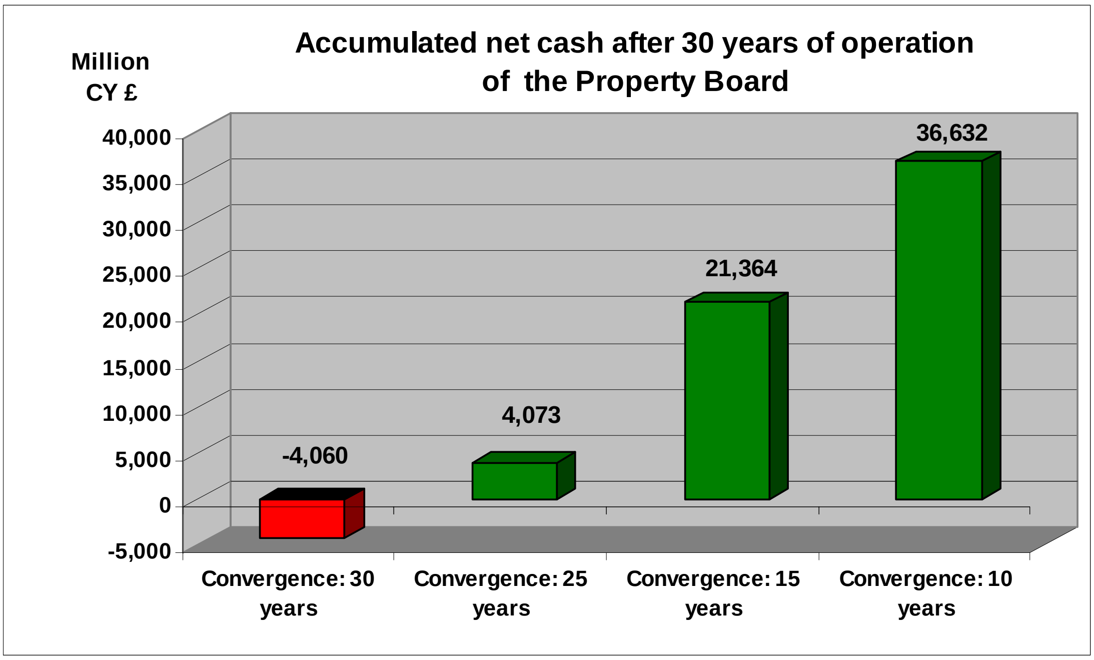
Scenario 1. Convergence time 30 years
In this (pessimistic) scenario we assume that prices in the Turkish Cypriot State increase on average at a rate of less than 9% a year for 30 years (only 5% on average after year 10). This is a pessimistic scenario, considering the 172% rise for land prices and 36% for housing units over the past two years. In year 30, property prices in both constituent states are at the same level. In this case, the Property Board will have accumulated within 25 years a total debt of CYP 3.8 billion. In fact in year 25, the loan-to-value ratio of the Board will exceed 80%, making it impossible to obtain any non-government-backed financing, given international banking practice. Therefore, under this scenario, the Property Board would become insolvent in 25 years.

Scenario 2. Convergence time 25 years
In this scenario we assume that property prices in the Turkish Cypriot State rise on average yearly by 11%, for the first 25 years (5% on average after year 15). In year 25, property prices in both constituent states will reach same levels. The maximum loan-to-value ratio is 50%, making it possible to borrow money and finance its operations, by using the property available as collateral. In this case, after 35 years the Property Board will have accumulated a total net cash of around CYP 4 billion available for distribution to the holders of Property Appreciation Certificates. However, taking into account the cost of money, this represents a net present value loss of -CYP 61 million.

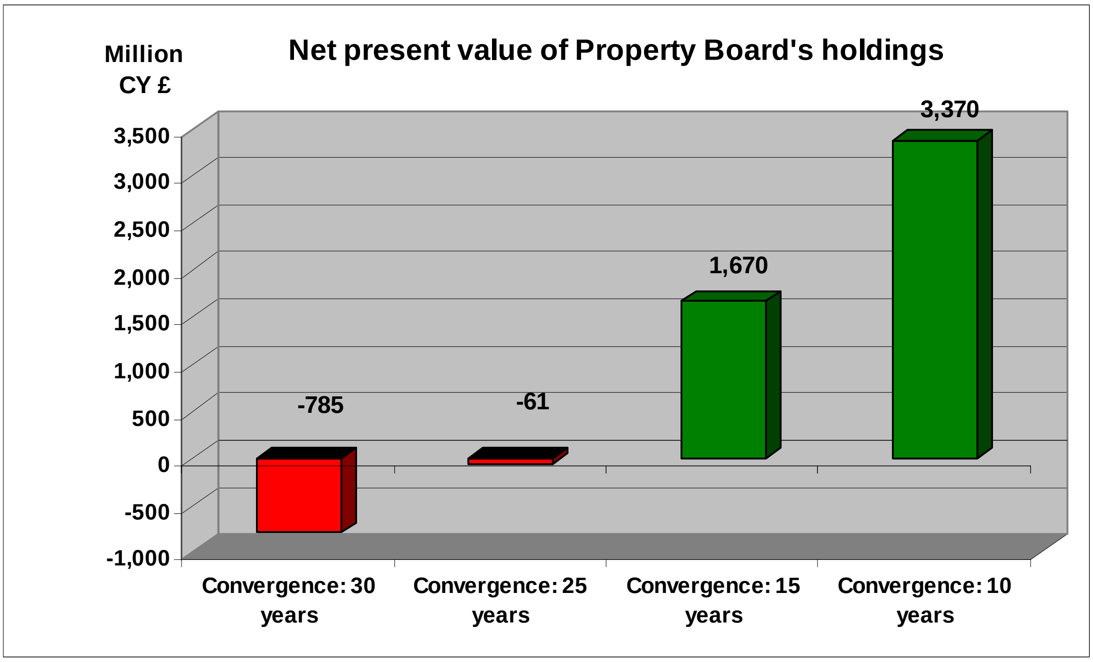
Scenario 3. Convergence time 15 years
In this scenario, we assume that property prices in the Turkish Cypriot State rise on average about 16% a year for the first 15 years and 10% on average for the entire 35-year period. In year 15, property prices in both constituent states will be the same. In this case, after 35 years, the Property Board will have accumulated a total net cash of around CYP 21 billion, available for distribution to the holders of Property Appreciation Certificates. This reflects a net present value of around CYP 1.7 billion.

Scenario 4. Convergence time 10 years
In this (optimistic) scenario, we assume that property prices in the Turkish Cypriot State rise by about 24% annually on average for the first 10 years and 5% for the remainder. In this case, in year 10 property prices in both constituent states are at the same level. The Property Board will have accumulated in 35 years a total net cash of CYP 36.6 billion available for distribution, reflecting a net present value of CYP 3.4 billion.

[11] A larger growth rate in the south implies higher growth rates in the north for same-period convergence, since this is meant to be a prudent scenario.



Graph 6: Accumulated Net Cash of the Property Board under the four different price-growth scenarios.



Graph 7: The net present value of the Property Board under the four different price-growth scenarios.

F. SUMMARY CONCLUSIONS

On the basis of our data analysis regarding property prices, the current speed of convergence of both the macroeconomy and property prices, prevailing theories on convergence and property price dynamics, and on the assumption that the political situation would be at least stable, we conclude the following:

- Convergence of property prices would continue and would most probably accelerate after reunification, even under conditions where the Turkish Cypriot State has the right to restrict investment.
- Property price convergence would lend significant support to the operation of the property regime, by raising the profits made by the Property Board from the sale of titles.
- It is quite possible that property prices in the south would be adversely affected by the supply shock following the restitution, although the effect would be localised. Even allowing for this to occur, it is not expected to have an adverse affect on the economics and viability of the Property Board.
- The Property Board would be profitable even if price-growth were much slower than expected and for a very long period. However, in the worst-case scenario, of converging with prices in the south only after 30 years, the property board would be unable to fulfil its financial obligations (without any intervention by the authorities).
- Under normal market and stable political conditions, we find that the Property Board would be profitable (even if “current values” were set much higher than market values).
- Additional safety mechanisms suggest that any downturn in prices that might occur would be short-lived. These include the ability of planning authorities to restrict the supply of land for development; the ability of the Property Board to limit the supply of titles for sale; the fact that it determines “current values”; and the known behaviour of potential sellers during a property price downturn.
- In sum, the property provisions of Annan V provide for a rapid convergence of both the property markets and the macroeconomies, even under the proposed restrictions. Without restrictions on investment rights, convergence would occur even faster.

Finally, we are convinced that convergence could occur on a more sustainable basis with some alterations to the conditions envisaged under Annan V. A discussion on this is beyond the scope of this paper, but we hope that our research will contribute to forming a basis for further research in this area.

G. ANNEX

1. History of the Annan Plan

Talks to solve the decades-old Cyprus problem have been held on and off for the past three decades, around the principle of a bi-zonal, bi-communal federation between the two communities, but it was only in early 2002, as it became clear that the Republic of Cyprus was well on its way to EU membership, that serious talks re-started. After a change of government in Turkey in October, and a declaration by the EU at Helsinki in December that the reunification of Cyprus was not a precondition of Cyprus' EU membership, talks intensified.

The first of five drafts of a comprehensive settlement of the Cyprus problem was submitted in November 2002, and was named by the two communities the “Annan Plan”. An attempt to have it endorsed by the two communities, before the key EU Helsinki summit that was due to decide on Cyprus' membership failed, when it was rejected by the Turkish Cypriot leader Rauf Denktash. At the Hague meeting on March 10-11th, 2003, only weeks before Cyprus signed the accession treaty to the EU, Denktash again rejected what was by this stage the third draft of the Annan Plan (Annan III) as a basis for negotiations.

Following this, the Republic of Cyprus signed the EU accession treaty on April 16th, 2004 and a week later, following months of demonstrations by Turkish Cypriots who supported the UN plan and EU membership, the administration in the north opened the checkpoints—allowing Greek Cypriots to travel north, under some restrictions, and Turkish Cypriots to travel south. Estimates of the number of Turkish Cypriots who now work daily in the south range from 3,000 to 6,000.

Under a deal hammered out in New York on February 10-13th, 2004 the two sides, agreed to a tight negotiating timetable, in which the UN would have the right to make final changes to the Annan Plan, if agreement between the two sides could not be reached by the end of the two-stage negotiation process envisaged under the agreement. As agreement was not reached by that deadline, the UN presented a fifth draft on March 31st. Two separate and simultaneous referenda were set for April 24th, 2004—one week before the Republic of Cyprus was set to join the EU. The plan was rejected by the Greek Cypriots and accepted by the Turkish Cypriots. Under the terms of the proposal, the plan therefore became legally null and void.

2. General Provisions of Annan Plan V

The fifth version of the UN Plan (Annan V) would have comprised two "constituent states", the Greek Cypriot State and the Turkish Cypriot State, linked by a common federal government of the United Cyprus Republic with limited powers. Around 8% of the territory not currently controlled by the Republic of Cyprus would be "handed over" to the Greek Cypriot State, allowing for the return of around half of displaced Cypriots (known locally as refugees). Current inhabitants of the area "subject to territorial adjustment"—mainly Turkish Cypriots and Turkish immigrants (known as settlers)—would be relocated within the Turkish Cypriot State and accommodation would be made available to them to purchase (through use of compensation bonds and Property Appreciation Certificates, personal funds, or borrowing of loans). Around 45,000 Turkish settlers would be able to adopt citizenship of the United Cyprus Republic, under the plan, while there would be incentives for a part the remainder of the Turkish immigrants to return to Turkey. Long-term temporary limits of up to 19 years were placed on the proportion of Greek Cypriots allowed to live in the Turkish Cypriot State and on the proportion of Greek nationals and Turkish nationals allowed to live in the United Cyprus Republic, while “safeguard measures” allowed for extending these periods further. The Turkish Cypriot State would also have the right, in the form of a temporary derogation from the EU’s *acquis communautaire*, to restrict the purchase of real estate by non-residents for up to 15 years. An additional safeguard clause would allow this to be extended with the consent of the EU on a period-by-period basis.

3. The property regime of the Plan

With few exceptions, all dispossessed owners of property lying in the territory that would fall in the other constituent state would be entitled to receive at the very least one house and one adjacent donum of land up to a maximum of one-third (3/9ths) of their total ownership. Five years after the adoption of the Foundation Agreement, they would be compensated for the remaining two-thirds: of this, one-third (2/9ths of their total ownership) would be in the form of interest-bearing compensation bonds with a maturity of 25 years, and two-thirds (4/9ths of their total ownership) would be in the form of "property appreciation certificates". The value of these would in effect be linked to the profits of the Property Board: once all bonds had matured, the holders of Property Appreciation Certificates would be entitled to receive any revenues generated from the sales and lease of affected property by the Compensation Trust after its operations were wound up. The restitution regime also included provisions in the form of a right of first (and secondary) refusal for current owners.

Property claims and payment of compensations would be treated by the Property Board, an impartial, independent administrative body, and its subdivisions. Non-reinstated property would be transferred to the Property Board, which would have to dispose of it or lease it on the market at market prices. Revenues generated from the management, sale or use, of affected property in the portfolio of the Property Board would be deposited in the Compensation Fund, which would receive a long-term loan of CYP100 million from the federal government within the first 18 months of its establishment.