Delivering the Cyprus Peace Dividend

Fiona Mullen
Mustafa Besim
Michalis Florentiades
About the Authors

**Fiona Mullen** has been providing independent economic analysis to an international audience for over 20 years. She founded Sapienta Economics Ltd in 2006 and launched the monthly Sapienta Country Analysis Cyprus in 2012. Clients include embassies, oil and gas majors, big four accounting firms, banks, and other local and international investors. Mullen is Economy Consultant to the United Nations Good Offices mission (2008-February 2016 and December 2017 to date, including as international staff member March 2009-April 2010). She has written extensively on the economics of a Cyprus settlement. Before moving to Cyprus Mullen was Senior Europe Analyst at the Economist Intelligence Unit (EIU) and Director of the EIU’s flagship Country Reports.

**Mustafa Besim** is a Professor of Economics at Eastern Mediterranean University. His fields of specialisation are public finance, economic development and investment appraisal. Besim served as a member of the Turkish Cypriot negotiating team for the Cyprus Talks in 2003-4, 2008-2011 and 2016-2017. He has published on the Turkish Cypriot economy with topics ranging from shadow economies, taxation, productivity, labour market and the future of the Turkish Cypriot economy, to peace economics and the recent global financial crisis. He has presented papers about taxation, competitiveness, sustainability of the Turkish Cypriot economy, significance of state budget and shadow economy, and fiscal federalism.

**Michalis Florentiades** is the Chief Economist and Head of Investment Research for XM, an online financial services company. He has more than 20 years of experience in the financial sector, performing roles related to economic and investment research and asset management. He previously worked as Head of Research for Hellenic Bank, the country’s third largest commercial lender. As part of his work for Hellenic, he wrote a book about the Cyprus and global economies during the period 2004-2011. As a CFA Charterholder and recognised expert in his field, he has featured on numerous occasions as a speaker at conferences and on television and is often quoted by the local media on specialist economic matters.
DELIVERING
THE CYPRUS PEACE DIVIDEND

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Mustafa Besim
Michalis Florentiades

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EXECUTIVE SUMMARY

The huge economic potential of Cyprus is currently held back by a range of factors that the division of the island amplifies. The economies in both the Greek Cypriot community (GCC) and the Turkish Cypriot community (TCC) suffer from a lack of competitiveness that is caused, among others, by high and volatile energy costs, poor public transport and deeply embedded vested interests. It is no surprise, therefore, that both the GCC and the TCC lag behind their regional peers in productivity. While they both suffer from small market size, it is the division of the island that prevents them from being able to leverage economies of scale. Each community also has its own particular chronic economic issues: the GCC is burdened by the problem of bad loans, for example, while the TCC lacks access to international markets and its potential is hampered by the low participation of women in the labour force. There are also of course large non-economic costs of division. For example, over 1,000 displaced people die each year without having received reinstatement or compensation for their dispossessed property.

A solution of the Cyprus problem would create large new markets for all of Cyprus. It would open up a new €650 billion market of Turkey to Greek Cypriots, especially for sectors such as tourism and professional services, and it would give Turkish Cypriots direct access to the €16 trillion EU market. This will give a significant boost across the island to tourism, professional services, shipping and, over the longer term, to higher education. Because of the knock-on effect of these sectors, it will also generate a considerable lift to retail and wholesale trade.

A solution is also expected to attract EU funds for the upgrading of ports, airports and other infrastructure in the Turkish Cypriot constituent state, and in areas subject to territorial adjustment in the Greek Cypriot constituent state. We expect that a solution should also lead to the convergence of property prices, as the property settlement will remove the burden of legal uncertainty that hangs over affected properties in both communities. This will lift land prices in both the TCC and in the areas subject to territorial adjustment. These dynamics will also attract considerable private foreign investment, which will have a broader positive impact on the real estate market.

A settlement of the Cyprus problem would entail faster and more lucrative exploitation of natural gas, at a time when the opportunity for exploiting natural gas is closing because of the rapidly increasing global competition from renewable energy sources. With differences among the various players resolved, insurance costs will fall, natural gas exploitation will become
cheaper for companies and they will have more markets to choose from. This will allow gas to be exploited more quickly and should allow it to be sold at higher profit margins, which will also boost government revenues. Given the large number of opportunities that a Cyprus solution will generate, we are confident that a solution of the Cyprus problem will generate a substantial “peace dividend” – the difference between economic performance with a solution and economic performance without one.

To quantify the peace dividend, we used two different methodologies for forecasting: one looking at each sector and one based on total factor productivity (TFP). For each of these methodologies, we produce a baseline, low and high forecast; in other words, we produce six forecasts in total. Taking the average of the two methodologies (the mean for constant prices and arithmetic average for growth rates), we find that a solution of the Cyprus problem would boost average incomes – gross domestic product (GDP) per capita – by between €6,800 and €11,000 compared with no solution. A solution would raise overall GDP by between roughly €11 billion to €17.4 billion after 20 years. Under our baseline scenario, real GDP growth would be, on average, 3.8% with a solution and only 2.3% under the status quo. We also conducted Monte Carlo simulations on the GDP forecasts (for all-Cyprus, the GCC and the TCC), and these confirmed that our forecasts lie within the probability range (in other words, within the bounds of possibility). We find that the net present value of the peace dividend (i.e., what a cumulative peace dividend of €14 billion over 20 years is worth today) is €78 billion in 2020 under our baseline forecast.

Stronger economic growth would also be accompanied by faster job-creation. While employment growth is subject to many variables, we tentatively expect a solution of the Cyprus problem to create around 100,000 more jobs in the first 10 years than under the status quo. Around 30,000 of these new jobs would be created in the tourism sector, 18,000 in wholesale and retail trade, 10,000 in construction and around 6,000 in the airline and shipping sectors.

The peace dividend relates of course to the gross gains, not to the investment and other costs of a settlement. Nevertheless, in addition to creating jobs, these kinds of growth rates would generate substantial tax and other government revenue that could support the costs of a settlement. For example, if a united Cyprus needed, at least initially, to fund property compensation from local sources, we find, under our baseline scenario, that the peace dividend could pay for almost two-thirds of property compensation, as long as the financial aspects of the property settlement are handled sensibly and with expert input.

It is important to recognise that the impact on specific companies and social groups will be different. It will depend to a large degree on their ability to adapt and on policies that help them adapt. In our analysis we have outlined the common fears expressed by the general public and by small and large businesses in focus groups that accompanied this research. We have also identified subgroups that we believe would be most vulnerable, and we have suggested policies to counteract the potential negative effects on these groups.
The baseline peace dividend of €14 billion is lower than in the *Cyprus Peace Dividend Revisited* (€19 billion) for two key reasons. First, in late 2014 the statistical authorities revised up the historical size of the GCC economy by around €2 billion, or 10%. This raises the starting point for our forecast, which in turn produces a lower growth rate for every additional euro of nominal GDP. Second, the “long arm” of the global financial crisis is continuing to have an impact, therefore we have been more cautious in our assumptions for the future.

The forecast for the overall peace dividend in our high scenario (€17.4 billion) could be reached with the right policies. These include a focus to ensure solid institutions, including addressing vested interests and good governance; advanced preparation; agreeing on prudent transition periods; and devising interventions to reduce the difference between “winners” and “losers.” Last but not least, global studies by respected institutions indicate that if a united Cyprus achieved gender equality in the workplace and raised women’s participation in the workforce, it would have a significant positive impact both on company profits and on economic growth.

**Figure ES.1**

<table>
<thead>
<tr>
<th>Peace dividend summary: all-Cyprus forecast (average of sectoral and TFP forecasts)</th>
<th>With solution</th>
<th>Without solution</th>
<th>Peace dividend (a)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Baseline scenario</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic size: GDP at constant prices by 2040 (EUR million)</td>
<td>54,223</td>
<td>40,259</td>
<td>13,964</td>
</tr>
<tr>
<td>Incomes: GDP per capita at constant prices by 2040 (EUR)</td>
<td>33,874</td>
<td>25,151</td>
<td>8,723</td>
</tr>
<tr>
<td>Growth: average real GDP growth rate 2021-2040 (%)</td>
<td>3.8%</td>
<td>2.3%</td>
<td>1.5%</td>
</tr>
<tr>
<td><strong>Low scenario</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic size: GDP at constant prices by 2040 (EUR million)</td>
<td>51,237</td>
<td>40,259</td>
<td>10,978</td>
</tr>
<tr>
<td>Incomes: GDP per capita at constant prices by 2040 (EUR)</td>
<td>32,009</td>
<td>25,151</td>
<td>6,858</td>
</tr>
<tr>
<td>Growth: average real GDP growth rate 2021-2040 (%)</td>
<td>3.5%</td>
<td>2.3%</td>
<td>1.2%</td>
</tr>
<tr>
<td><strong>High scenario</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic size: GDP at constant prices by 2040 (EUR million)</td>
<td>57,697</td>
<td>40,259</td>
<td>17,438</td>
</tr>
<tr>
<td>Incomes: GDP per capita at constant prices by 2040 (EUR)</td>
<td>36,044</td>
<td>25,151</td>
<td>10,893</td>
</tr>
<tr>
<td>Growth: average real GDP growth rate 2021-2040 (%)</td>
<td>4.1%</td>
<td>2.3%</td>
<td>1.8%</td>
</tr>
</tbody>
</table>

**Relative incomes: TCC GDP per capita as % of GCC by 2040**

<table>
<thead>
<tr>
<th></th>
<th>With solution</th>
<th>Without solution</th>
<th>Peace dividend (a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCC GDP per capita as % of GCC</td>
<td>85.0%</td>
<td>63.4%</td>
<td>-</td>
</tr>
</tbody>
</table>

(a) Difference between the outcome with a solution and the outcome without a solution. 
*Source:* Authors’ forecast.
Figure ES.2

**Economic size: GDP by 2040 (baseline forecast)**
(EUR million at constant 2017 prices)

- All CY: without solution: 40,259
- All CY: with solution: 54,223

Figure ES.3

**GDP per capita by 2040 (baseline forecast)**
(EUR at constant prices; scaled axis)

- All CY: with solution: 33,874
- All CY: without solution: 25,151
ACKNOWLEDGEMENTS

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Fiona Mullen  
Mustafa Besim  
Michalis Florentiades

*Nicosia, December 2019*
CHAPTER 1:
INTRODUCTION AND APPROACH TO RESEARCH

It has been over five years since The Cyprus Peace Dividend Revisited\(^1\) was completed in April 2014. That report was the first attempt to quantify the peace dividend using both a sector-by-sector forecast and a forecast for total factor productivity (TFP). This followed the three-part Day After series, also published by the Peace Research Institute Oslo (PRIO), which pioneered the concept of a Cyprus peace dividend using different forecasting methodologies.\(^2\)

When The Cyprus Peace Dividend Revisited was published, the economy of the Greek Cypriot community (GCC) was still in recession following a banking crisis that peaked in March 2013, and the economy of the Turkish Cypriot community (TCC) was enjoying a period of stability for the Turkish lira, as well as historically low inflation rates. Since then, the GCC economy has returned to growth, having surpassed its pre-crisis size in 2018, while the TCC economy has been affected by a sharp depreciation of the Turkish lira in August 2018 and the related negative impact on tourism from Turkey and on local spending power. At the same time, the effects of the global financial crisis that began in 2008 are still being felt. Despite historically low or even negative interest rates, Eurozone banks are reluctant to expand credit quickly, largely as a result of stricter regulatory requirements that were introduced as a response to the global financial crisis. Risks to global growth include the potential for trade wars, the impact of the departure of the UK from the EU (Brexit) and the impact on economies of either climate change or policies to address climate change. In addition, the statistical authorities have revised up the historical size of the GCC economy substantially since our previous forecast, in order to take into account large transactions by shipping-related special purpose entities. In 2014 the official size of GDP in the GCC was raised by around €2 billion, or 10%. This raises the starting point for

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our forecast, which in turn produces lower growth rates. It is therefore an opportune moment to update our forecast, while also making our analysis easier to understand for non-specialists.

Our approach to updating the peace dividend is fundamentally the same as in our 2014 report. We produce a forecast for gross domestic product (GDP) at constant prices with a solution of the Cyprus problem and a forecast for GDP without a solution of the Cyprus problem; the difference between the two is the “peace dividend.” As we did in 2014, we use two methodologies for our forecast: a sectoral forecast, and a forecast based on total factor productivity (TFP), using the Solow Residual. While economists often use trade-based models for long-term forecasting, we believe that a sector-based forecast is more appropriate for a small island economy in which services account for more than 80% of GDP in both communities. In 2018 exports of services accounted for 77% of all exports of goods and services in the GCC and more than 90% of exports of goods and services in the TCC. Notwithstanding the difficulties of long-term forecasting, a sector-based forecast also has the advantage of looking at the potential for all of the productive sectors of the economy.

To estimate growth rates, we split our forecast into four stages; we “pin” each stage to growth rates at the equivalent stage of the business cycle in the past; then we apply different discounts to those historical growth rates. We do this because one of the most important assumptions in both of our forecasts is that the growth rates in each of the four stages of our forecasts will never be as high as they were in the equivalent stages of the business cycle in the past (before the global financial crisis). It was an assumption we had already made in 2014 but in our updated forecast we have been even more cautious.

The main departure from our previous methodology is that we have produced low, medium and high forecasts: three forecasts each both for the sectoral and the TFP forecasts. This is more in line with international practice and acknowledges more explicitly that forecast outcomes are dependent on initial assumptions. While we have tested our forecasts using the Monte Carlo simulations – a way of measuring whether forecasts fall within a range of probabilities – our forecasts should nevertheless be taken as scenarios, rather than confident predictions about the future. Another change compared with 2014 is that we have highlighted how one might maximise the peace dividend with certain policy interventions. We have also considered asymmetries – winners and losers – and provided recommendations for how to address those who would be least likely to benefit economically from a settlement of the Cyprus problem. Finally, in order to keep our findings palatable to the non-specialist reader, we have moved more technical economic discussions on methodology and outputs to a separate Technical Appendix, available online.

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3 As an illustration, if I earn €10 in Year 1 and one more euro in Year 2 so that my income is €11, my income has risen by 10%. If I earn another extra euro in Year 2 so that my income is €12, my income has risen by 9.2%.

Introduction and approach to research

In the following chapters, we begin in Chapter 2 by assessing the economic challenges that currently prevail in the GCC and TCC. In Chapter 3 we make the qualitative arguments about why a solution of the Cyprus problem will increase economic opportunities for both communities. In Chapter 4 we present our forecast results. These results quantify the peace dividend on the basis of low, baseline and high forecasts and on the basis of our sectoral and TFP methodologies. This chapter also includes estimates for the boost to jobs from a solution of the Cyprus problem. In Chapter 5 we outline some policies that could maximise the peace dividend – actions that could be taken in the early days and months of a settlement that should increase the chances of reaching our “high” forecast. In Chapter 6, we address an important issue that will affect the sustainability of a settlement, namely, how to ensure that the property settlement is economically viable. We include a range of scenarios for the potential cost of property compensation and examine whether it could be financed from domestic sources in case that is necessary in the early stages of the post-settlement. In Chapter 7 we make our conclusions and put forward some recommended next steps to ensure that the peace dividend is maximised.

In his report to the UN Security Council of June 2018, the UN Secretary-General noted that “[e]vidence from peace processes from around the globe has confirmed that the meaningful participation of women deepens peacebuilding efforts measurably and leads to more sustainable peace.” He added that, in this context, “a gender-sensitive socioeconomic impact assessment could be a useful area for future research.” In response to this, in July 2018 the UN Security Council called upon the two leaders to consider this proposal, while also calling for greater involvement of civil society. With this call in mind, the authors and PRIO began to discuss how we might contribute to such an assessment in our research. Since then, in its Resolution of January 2019, the Security Council has requested the UN to take forward its own gender-sensitive socioeconomic impact assessment. A full gender assessment in line with international practice is beyond the scope of our report. Nevertheless, we have initiated what we have termed a preliminary gender-sensitive socioeconomic impact assessment by analysing some key statistics on men and women, and highlighting how focusing on gender equality can enhance the peace dividend. Also in line with best practice, we have not placed this analysis in a separate section that can too easily be ignored, but have instead discussed issues where they become relevant. We hope that our analysis can serve as food for thought for a more comprehensive assessment that involves, as requested by the Security Council resolution, “the full and effective participation of civil society and women in particular at all stages of the peace process.”

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8 For example, it does not analyse in detail equal work for equal pay, or address issues such as harassment, violence against women, the adequacy of social services, the treatment of migrant workers and intersectional themes such as LGBTI issues, poverty, class, disability and the impact on different communities living in Cyprus.
CHAPTER 2:
CYPRUS’ CURRENT ECONOMIC CHALLENGES

Both the economy of the Greek Cypriot community (GCC) and that of the Turkish Cypriot community (TCC) face challenges that are either specific to their own communities or specific to Cyprus more generally. At the same time, they face more general issues that can be found in other economies. All of these challenges and issues hold back ability of the GCC and TCC to thrive and all these hindrances should benefit from a settlement of the Cyprus problem. We detail these specific and general challenges below.

2.1 Community- and Cyprus-specific challenges

High and volatile electricity costs (GCC and TCC). Both the GCC and the TCC depend for electricity production on imported diesel and heavy fuel oil. These fuels are not only high in noxious emissions, they are also vulnerable to price-swings, as they are influenced by global oil prices. At the same time, lack of competition means that there are few incentives for electricity producers to keep prices low. In 2018, before taxes, GCC medium-sized businesses
Delivering the Cyprus peace dividend

paid €0.12 cents per kilowatt-hour (kW·h) for electricity (the highest in the EU), while TCC households paid €0.13 cents per kW·h, compared with an EU average of €0.08. A solution of the Cyprus problem, combined with other EU rules to cut emissions and encourage renewable energy, as well as easier electricity connections with the EU, should go some way to reducing prices for consumers.

**Highest water stress in the EU (GCC and TCC).** A 2013 study by the World Resources Institute found that Cyprus had the highest water stress in the EU. Moreover, the island is expected to suffer from extreme high temperatures, which will worsen the water stress and also have a negative impact on tourism. A solution of the Cyprus problem will allow the entire island to receive water via the pipeline that comes from Turkey, provided prices are competitive. A solution should also lead to island-wide cooperation on limiting water use, especially in the construction and tourism sectors.

**Poor public transport system (GCC and TCC).** A poor public transport system generates human costs in terms of a high number of deaths on the roads, as well as reducing employment opportunities and hindering access to health services. An under-developed transport system also reduces the competitiveness of tourism and higher education by generating additional costs for tourists and students, who are also increasingly environmentally conscious. In 2017 the ratio of fatal traffic accidents was 54.2 per million inhabitants in the GCC and 105.1 per million inhabitants in the TCC, compared with 42.7 for the “old” pre-2004 EU members. A good, safe public transport system has also been demonstrated to have a positive impact on access to work and on health.

**Bad loans (GCC).** The repercussions of the financial crisis have left the GCC with the second highest non-performing loans (NPL) ratio in the EU, despite many years of reductions. According to European Banking Authority data, the NPL ratio in the GCC was 23.6% in the first quarter of

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11 The high death toll is of course also related to limited use of seat belts and child seats and driving under the influence of drugs and alcohol.


13 See, for example, Johnson, Ercolani and Mackie, “Econometric analysis of the link between public transport accessibility and employment,” *Transport Policy* 60 (2017) 19.

2019, while the EU/EEA average was just 3.1%.\textsuperscript{15} The ratio of non-performing exposures of (NPE) measured on a stricter basis is even higher, at 30% in the second quarter of 2019.\textsuperscript{16} A settlement of the Cyprus problem should quickly reduce bad loans owing to both the settlement of property claims, which will increase the ability to pay back loans, and the general boost to the economy.

**Shadow economy in the TCC.** A number of studies on the shadow economy and tax evasion in the TCC indicate that it is a serious problem. Besim et al\textsuperscript{17} estimate that the proportion of economic activities that are not captured by the statistics office is as high as 29% of registered GDP. In another study, Besim et al\textsuperscript{18} estimated the percentage of informal employees working in the shadow economy at 20.8% of the total. From the fiscal point of view, the situation is even more serious, because as much as 55%-60% of income generated in the TCC is not reported to the tax authorities. This entails not only huge revenue losses to the authorities but it also creates unfair competition and many other problems in the TCC economy. A solution of the Cyprus problem can help the TCC strengthen institutions relating to taxation and statistics, which will help mitigate the activities of the shadow economy.

**Over-dependence on one market (TCC).** In the TCC, the absence of international recognition has over the years led to an increasing dependence on Turkey for tourism and external trade. Tourists from Turkey account for three-quarters of all tourists and exports to Turkey account for 66% of total exports of goods. The use of the Turkish lira also makes inflation volatile and implies exchange-rate risks for those who borrow in foreign currencies. A solution of the Cyprus problem will end this kind of volatility and open up a raft of new markets for tourism and trade.

**Economies of scale problem.** Cyprus is a small island, which means that inherently it has difficulty reaching economies of scale. This handicap is exacerbated by three factors: the \textit{de facto} division of the island into two separate markets; the limited access to the EU and other global markets for the TCC; and no access to the Turkish market for the GCC. There is also ineffective use of both labour and capital, especially in the TCC. For example, the current subsidy system leads to the inefficient allocation of resources and hampers capacity sharing. The division therefore results in high incurred costs.

\textsuperscript{15} EBA Risk Dashboard, \url{https://eba.europa.eu/risk-analysis-and-data/risk-dashboard}.

\textsuperscript{16} Central Bank of Cyprus, Aggregate Cyprus banking sector data (non-performing facilities data), \url{https://www.centralbank.cy/en/licensing-supervision/banks/aggregate-cyprus-banking-sector-data}.

\textsuperscript{17} Besim, Mungan, Gürpınar and Göksel, “Shadow Economy in North Cyprus: Measurement, policies and action plan,” EMUPRESS, Doğu Akdeniz Üniversitesi Yayınları, 2015a (in Turkish), \url{http://i-rep.emu.edu.tr:8080/xmlui/handle/11129/1861}.

2.2 Competitiveness

The competitiveness of a reunited Cypriot economy will be a key determinant of economic prosperity and living standards in the medium- to long-term, as opposed to the short- to medium-term positive effects of reunification. The ability of a united Cyprus to be competitive and to have high productivity can ensure the island a bright economic future beyond the years that the settlement’s more immediate benefits will be more obvious. For comparative purposes this subsection is based on the 2018 World Economic Forum Global Competitiveness Index 2017-18 for the GCC and the most recent simulated 2017-18 Index for the TCC, which is produced annually by the Turkish Cypriot Chamber of Commerce on the basis of the same methodology.

Both economies suffer from weak competitiveness. In the 2018 report, the GCC scored 4.3 out of 7 while the TCC scored 3.77 out of 7 using the same methodology. The GCC ranked only 64 out of 137 economies (it rose to 44th in 2019), while the TCC ranks 109 (equivalent) out of 127.
Cyprus’ current economic challenges

Figure 2.3

Comparative competitiveness indicators
Based on Global Competitiveness Index, 2017-18

<table>
<thead>
<tr>
<th></th>
<th>Rank out of 137 GCC</th>
<th>Rank out of 137 TCC</th>
<th>Score 1-7 GCC</th>
<th>Score 1-7 TCC (a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Competitiveness Index, 2017-18</td>
<td>64</td>
<td>109</td>
<td>4.3</td>
<td>3.77</td>
</tr>
<tr>
<td>A: Basic requirements</td>
<td>49</td>
<td>90</td>
<td>4.9</td>
<td>4.33</td>
</tr>
<tr>
<td>1st pillar: Institutions</td>
<td>51</td>
<td>95</td>
<td>4.2</td>
<td>3.5</td>
</tr>
<tr>
<td>2nd pillar: Infrastructure</td>
<td>30</td>
<td>100</td>
<td>5.1</td>
<td>3.3</td>
</tr>
<tr>
<td>3rd pillar: Macroeconomic environment</td>
<td>97</td>
<td>79</td>
<td>4.2</td>
<td>4.55</td>
</tr>
<tr>
<td>4th pillar: Health and primary education</td>
<td>39</td>
<td>56</td>
<td>6.2</td>
<td>5.97</td>
</tr>
<tr>
<td>B: Efficiency enhancers</td>
<td>55</td>
<td>118</td>
<td>4.4</td>
<td>3.45</td>
</tr>
<tr>
<td>5th pillar: Higher education and training</td>
<td>46</td>
<td>97</td>
<td>4.9</td>
<td>3.78</td>
</tr>
<tr>
<td>6th pillar: Goods market efficiency</td>
<td>25</td>
<td>120</td>
<td>4.9</td>
<td>3.84</td>
</tr>
<tr>
<td>7th pillar: Labour market efficiency</td>
<td>39</td>
<td>122</td>
<td>4.5</td>
<td>3.52</td>
</tr>
<tr>
<td>8th pillar: Financial market development</td>
<td>108</td>
<td>102</td>
<td>3.4</td>
<td>3.55</td>
</tr>
<tr>
<td>9th pillar: Technological readiness</td>
<td>32</td>
<td>64</td>
<td>5.5</td>
<td>4.35</td>
</tr>
<tr>
<td>10th pillar: Market size</td>
<td>109</td>
<td>134</td>
<td>2.9</td>
<td>1.68</td>
</tr>
<tr>
<td>C: Innovation and sophistication factors</td>
<td>55</td>
<td>117</td>
<td>3.8</td>
<td>3.14</td>
</tr>
<tr>
<td>11th pillar: Business sophistication</td>
<td>55</td>
<td>127</td>
<td>4.2</td>
<td>3.26</td>
</tr>
<tr>
<td>12th pillar: Innovation</td>
<td>53</td>
<td>103</td>
<td>3.4</td>
<td>3.02</td>
</tr>
</tbody>
</table>

(a) Calculated by using equivalent indicators.
Sources: World Economic Forum (GCC); Turkish Cypriot Chamber of Commerce (TCC using World Economic Forum methodology).

Market size

The lowest score is for market size: the GCC is ranked 109 out of 137, while the TCC is placed 134 out of a sample of 139 economies. As Cyprus in a global context is a small country in terms of both area and population, this is partly to be expected. The larger an economy, the easier it is to achieve economies of scale, which generally results in increased efficiency and lower cost. Examples of such economies of scale are commonly found in sectors such as utilities, including power production and distribution and water supply. It is perhaps because of this factor that electricity prices for small business in the GCC, excluding taxes, were the highest in the EU in 2018, according to Eurostat. In addition, market size will expand with the new EU markets for the TCC and the new Turkish market for the GCC.
A solution would make a positive impact on market size, creating an integrated economy that would be in excess of €26 billion in Year 1 of a settlement (2021). As explained in Chapter 4, it is also expected to produce higher growth rates, which would result in a larger economy compared to a no-solution scenario. The new, re-unified economy would certainly improve the competitiveness score in this regard.

**Financial market development**

Another area that has substantial scope for improvement for both the GCC and the TCC is that of financial market development. Regarding this pillar, market size is of course important as it is easier for larger countries to support liquid and deep financial markets that encourage equity and debt financing and trading.

As part of the financial system, the role of the banking sector in a post-settlement Cyprus is worth commenting on. The banking sector in the GCC is facing challenges in the form of high non-performing loans, whereas in the TCC, banks are relatively small and sometimes exposed to foreign currency loans – a potential risk given the volatility of the Turkish lira. While these problems are being actively managed and are currently under control, it is still a source of concern whether the local banks will be in a position to play an appropriately active role in financing the reunification of the country.

Therefore, developing non-bank financial markets in Cyprus is a logical way for the reunified island to reduce its reliance on bank financing. One should also note that the GCC has one of the highest private debt/GDP ratios in the EU. Access to financing was reported as the most problematic factor of doing business in the GCC by the World Economic Forum and better access to financial markets can help to alleviate this problem – at least for large and medium-sized companies.

Development of financial markets in Cyprus can be a means of raising equity and debt capital for local companies, which can then be used for expansion and for taking advantage of the opportunities that reunification will present. This could enable the private sector and private investors to become more actively involved and might also encourage foreign portfolio investors who would want to gain exposure to a country with bright growth prospects.

**Getting ready for the future: technological readiness, innovation and business sophistication**

Both rapid technological change and major changes in the global economy are foreseen for the coming years; these changes include artificial intelligence, the internet of things, robotics, virtual reality and other disruptive technologies. It is important to examine how a reunified Cyprus will cope with such changes. Even though Cyprus plays a limited role in the development of such future technologies, the competitiveness reports contain some encouraging messages, in that for both the TCC and the GCC, technological readiness is a pillar where both communities score well in relative terms, that is to say, above their average score in other pillars. While
a united Cyprus would not be a technology leader, it could be a relatively early adopter of future technological change, given the country’s readiness to adapt to technology and, particularly, its strong willingness to apply the latest information and communications technologies.

With respect to the future, if a united Cyprus is to achieve its maximum potential, innovation and business sophistication will have to improve. It is interesting that the two communities’ economies present the same pattern: they score highest in Basic Requirements (BR), followed by Efficiency Enhancers (EE); they score lowest in the Innovation and Sophistication (IS) pillars. This is to be expected in an economy in the stage of development of Cyprus, but it also demonstrates that for the reunified economy to achieve “promotion” to a higher category, significant improvement is needed, particularly in the area of innovation and sophistication. Currently, the public sector does not seem to be helping much in that direction, as coincidentally for both GCC and TCC economies, inefficient government bureaucracy is cited as the second most problematic factor for doing business.

It remains to be seen whether the state authorities in a reunified Cyprus will provide a more positive business environment with good governance, which will encourage innovation and help businesses to become more sophisticated. However, the checks and balances that would exist in a united Cyprus within an EU and a federal structure, and that are currently missing as a result of the Cyprus problem,19 would likely exert a positive effect on good governance. This, in turn, would help foster technology, as universities across the island could work together, sharing their researchers and established techno parks. Technological research is also one area of possible cooperation between universities, the public sector and the private sector. An example of such an initiative is RISE,20 in which the three public universities of the GCC participate and which is funded by the EU’s Research and Innovation programme. Improving the entrepreneurial ecosystem is also important for the TCC, and here the EU is supporting entrepreneurship through the “Innovative Entrepreneurship and Dialogue” programme implemented by the Northern Ireland Cooperation Overseas (NI-CO).21 In the GCC, the IDEA Innovation Centre22 is another multi-partner effort to foster innovation and entrepreneurship through the support of start-ups. To sum up, exploring more deeply the effects of reunification on competitiveness, and the interplay between the GCC and TCC economies in this area, will ensure the island’s productivity growth well into the future and after the initial positive effects of reunification subside.

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20 Research centre on Interactive media, Smart systems and Emerging technologies (RISE), http://www.rise.org.cy/en-gb/.
22 IDEA Innovation Center, https://ideacy.net/.
2.3 Productivity

Productivity growth is the key to ensuring that an economy remains competitive. If you start by producing 20 cars each year with 10 people, then your productivity growth is flat. If you then begin to produce 21 cars with the same 10 people, then your productivity has grown. Productivity growth in both the GCC and the TCC has not kept pace with regional peers in the past 10 years. One would expect that GCC long-term productivity growth should be closer to that of other wealthier, small, new member states, such as Slovenia and Estonia. However, average GCC productivity growth in 2006-17 (the most recent comparative period available) was just 0.4%, compared with 1.1% for Slovenia and 1.7% for Estonia. Productivity growth in the TCC should be closer to economies at a similar stage of development, which would mean somewhere between Poland and Turkey. However, average TCC productivity growth in 2006-17 was close to zero, compared with a much higher 2.1% in Turkey and 2.6% in Poland. Factors that affect productivity include energy costs, the efficiency of the transport network, technology uptake, the cost of finance and the quality of the labour force.

Figure 2.4

Average productivity growth, 2006-2017
(% GDP at constant prices per person employed)

Poland 2.6
Turkey 2.1
Estonia 1.7
Slovenia 1.1
Eurozone 0.6
GCC 0.4
TCC 0.005

Source: Figures derived by authors from OECD, Cystat and SPO.

2.4 Women’s labour force participation

The public pensions systems in both the GCC and TCC are run on a classic pay-as-you-go system, meaning that today’s payments to pensioners are funded by today’s contributions from workers. In the context of an ageing population, therefore, a high overall labour force participation (LFP) rate is important for ensuring the long-term viability of pensions and social security systems. In addition, research strongly suggests that raising the LFP rate among
women, typically known as the female labour force participation rate, is good for economic growth, while ensuring gender equality in the management positions is good for profits. We present and discuss this research in more detail in Chapter 5 (section 5.4). Even where women are represented in the labour force, their work is traditionally concentrated in the lower paid sectors and rarely at decision-making level positions. The level of representation of women at the highest level of decision-making in the public sector is still also poor.

The GCC has male, female and total LFP rates that are higher than the EU average, although there is still a gap between the male and female LFP rates (see Figure 2.5). However, the TCC has lower LFP rates in all three categories. The female LFP rate is particularly low, at just 40.3% for the over-15s in the last quarter of 2018, compared with an average of 52.1% in the 28 members of the EU (EU28) and 57.4% in the GCC. Moreover, the difference among regions is quite stark, with a female LFP of just 27.6% in Lefka (see Figure 2.6). Although the latter could be partially explained by differences in the average age, it does not explain the very large gap between male and female participation rates. In short, the very low female LFP rate, the lower overall LFP rate, as well as a high degree of informal employment, currently act as a drag on growth in the TCC.

**Figure 2.5**

![Labour force participation rate for over-15s in 2018Q4](image)

Sources: Eurostat, Cystat, SPO.

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23 According to the 2011 TCC census, Lefka (a rural part of Morphou) had a population of only 11,091 in 2011. The over-65 population was 11% of the total, compared with an average 8% for the TCC. TCC data report only the 15+ labour force, rather than the 15-64 labour force, which is more typical for other economies. The low overall labour force participation rate in Lefka is therefore partly explained by the higher proportion of people or retirement age. At the same time, however, it does not explain the large difference between male and female participation rates.

Figure 2.6

TCC 15+ labour force participation by district (%)

<table>
<thead>
<tr>
<th>District</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nicosia</td>
<td>46.2</td>
<td>60.5</td>
</tr>
<tr>
<td>Total</td>
<td>40.3</td>
<td>58.6</td>
</tr>
<tr>
<td>Famagusta</td>
<td>40.2</td>
<td></td>
</tr>
<tr>
<td>Kyrenia</td>
<td>37.9</td>
<td></td>
</tr>
<tr>
<td>Morphou</td>
<td>36.3</td>
<td>56.2</td>
</tr>
<tr>
<td>Karpassia</td>
<td>34.8</td>
<td>63.8</td>
</tr>
<tr>
<td>Lefka</td>
<td>27.6</td>
<td></td>
</tr>
</tbody>
</table>

Source: SPO.
CHAPTER 3:  

WHY A SOLUTION WILL INCREASE ECONOMIC OPPORTUNITIES

3.1 Five key reasons why the market will expand

A solution of the Cyprus problem will boost economic activity, and therefore expand the pie for everyone, in five key ways.

1. Large new markets. A settlement will open up the €650 billion market of Turkey for Greek Cypriots, especially for services such as tourism and professional services. A settlement will also give direct access to the €16 trillion EU market to Turkish Cypriots. As explained below, this will give a large boost across the island to tourism, professional services, shipping, and, owing to the knock-on effect, retail and wholesale trade. Over the longer term it will also give lift the higher education sector.

2. Higher property prices. One issue that can often be overlooked in assessing the economic impact of a Cyprus settlement is the impact on economic growth of low interest rates. A solution of the Cyprus problem will entail a very sharp drop in interest rates for borrowers in the TCC and the near-removal of exchange-rate risk, since property and rents in the TCC are typically priced in British sterling. As has been shown elsewhere in the Eurozone, the drop in interest rates will have a significant positive impact on property prices. Indeed, we believe that the risk of a boom-bust scenario for the TCC and high inflation in non-tradeables such as real estate and services is higher than the risk of slow or negative GDP growth rates. Accelerating this trend will be the resolution of the property issue, which will remove the legal uncertainty that currently affects properties in both communities. Property values will rise in both the TCC and in the areas subject to territorial adjustment that will form part of the Greek Cypriot constituent state after a settlement. It is also likely to raise the value of Turkish Cypriot property in the south. It is often argued that overall property prices in the GCC will fall after a settlement because new property supply will come “onto the market.” While it is true that land in the buffer zone or in the fenced-off district of Varosha will constitute new supply, this is not the case for the vast majority of the property, currently situated in the TCC, which is already bought and sold in local and international markets regardless of its legal status. Nevertheless, what one can say is that the supply of property with no legal impediment will increase, and that this will
create price competition for properties in prime areas. (Prices for regular residences will be more closely affected by factors such as the quality of infrastructure, schooling, healthcare and so on.) How quickly affected properties in the TCC and the GCC can be traded with no legal impediment will depend to a large degree on the design of the property settlement (see Chapter 6). A balance will need to be struck between one that is too bureaucratic and slow, which could have a negative impact on the entire real estate market, and one that is too fast, which might also dampen prices by releasing saleable property too quickly.

3. Faster gas revenues. With differences among the various players resolved, natural gas exploitation will become cheaper for companies as insurance costs fall, and they will have more markets to choose from. This will allow gas to be exploited more quickly and to be sold at higher profit margins (see below).

4. EU and related funds. Comparatively low per-capita incomes in the TCC should mean that it qualifies for the highest form of support from EU Regional Development and Cohesion Policy funds, as long as the lowest per-capita income areas in Cyprus are counted as separate regions for EU funding purposes. In addition, one can envisage special funds, like those enjoyed by Northern Ireland and the borders of the Republic of Ireland, in a post-settlement Cyprus. We therefore expect that a settlement of the Cyprus problem will attract EU funds for upgrading ports, airports and other infrastructure in the TCC, as well as for promoting social cohesion across the country. Direct support could also be complemented by loans from institutions such as the European Bank for Reconstruction and Development (EBRD) and the European Investment Bank (EIB).

5. Private foreign investment. All these factors will combine to raise the interest of the international media in Cyprus, creating “positive” stories, which should help attract private foreign investors to Cyprus. Credit ratings could also improve, which in turn will cut borrowing costs. For example, the credit rating agency, Fitch Ratings, said in April 2016\(^\text{25}\) that a settlement of the Cyprus problem would “benefit both sides” of Cyprus.

3.2 The opportunities for tourism

Turkey is a fast-growing source market for tourism

In 1996, Greece and Turkey came close to war and traded very little with each other. At the time, therefore, few would have expected an increase in trade and tourism between the two

countries. However, in 1999 there was a thaw in relations, after which trade and tourism between the two countries soared. By 2002 (after a banking crisis in Turkey in 2001), Greece’s receipts from Turkish tourists had risen almost 12 times relative to 1999, while Turkey’s receipts from Greek tourists had risen almost 18 times. Both economies benefited. We expect a similar, if less pronounced, trend in a post-settlement Cyprus. Turkey is already a large and rapidly growing market for global tourist operators, thanks to its growing middle class. Outbound tourism (international departures) from Turkey rose from 4.9 million in 2008 to 8.9 million in 2017 (see Chart 3.2) and Turkish tourism arrivals in Greece more than trebled in this period. Turkish tourists also spend more on average than Greek tourists do. Globally we calculate from OECD data that in 2017 Turkish tourists spent €478 per visit, while Greek tourists spent only €248 (although Greek spending in the GCC is higher, at around €350 per visit).

**Figure 3.1**

Tourism revenue earned by Greece and Turkey after rapprochement of 1999 (EUR m)

![Graph showing tourism revenue earned by Greece and Turkey after rapprochement of 1999](chart)

Source: Eurostat.

Around 1.4 million Turkish tourists already visit northern Cyprus each year, but are unable to cross to the south. A united island will offer them far more variety, which will help offset the fact that prices will be set in euro. However, just as Turkish Cypriot retailers accept payments in Turkish lira, sterling or euro today, we expect private merchants in a united Cyprus to continue to exercise their freedom to accept foreign-currency payments. With obstacles to island-wide

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27 Mullen, Antoniadou-Kyriacou and Oğuz, *The Day After: Commercial Opportunities following a solution to the Cyprus problem*, PRIO 2008, [https://cyprus.prio.org/Publications/Publication/?x=1169](https://cyprus.prio.org/Publications/Publication/?x=1169).
tourism lifted, there will also be greater variety for tourists from other countries too. In addition to tourists who come for beach holidays, there is significant potential for niche markets, such as religious, cultural heritage, conference, marina and cruise tourism. Both sides of the island have important religious sites that will be of interest to Christian and Muslim tourists and which will be easier to access from any part of the island after a settlement. These include Apostolos Andreas monastery in the TCC and the Hala Sultan Tekke mosque in the GCC. Salamis and the old walled city of Famagusta would probably both become World Heritage sites, which would also boost their visibility to tourists. Tourists interested in cultural heritage could visit Tomb of the Kings in Paphos, Kourion in Limassol and Salamis in Famagusta, for example. Cruise tourism encompassing Israel, Greece, Turkey and Cyprus would also be a great draw for religious or archaeological tourists.

**Figure 3.2**

<table>
<thead>
<tr>
<th>Year</th>
<th>Outbound tourism from Turkey ('000, source: OECD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>4,893</td>
</tr>
<tr>
<td>2009</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td></td>
</tr>
<tr>
<td>2011</td>
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<tr>
<td>2012</td>
<td></td>
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<tr>
<td>2013</td>
<td></td>
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<tr>
<td>2014</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>8,887</td>
</tr>
</tbody>
</table>

*Source: OECD.*

**Investment in raising capacity**

The tourism sectors in both the GCC and the TCC have suffered in the past from capacity constraints. The opening of the fenced-off district of Varosha under internationally recognised conditions, and the potential to attract more of the growing number of Turkish citizens who travel each year, as well as other tourists drawn by the greater variety on offer, will encourage investment in hotels, other tourism-related infrastructure and the upgrade of cultural heritage sites. It will therefore enlarge the available market for everyone.
3.3 The opportunities for natural gas

The Aphrodite field offshore Cyprus, with an estimated 4.5 trillion cubic feet (tcf), was first discovered in 2011 but no gas will be extracted before 2025. The nearby Israeli Leviathan field (20 tcf) was discovered in 2010 and started production at the end of December 2019. Production of Aphrodite has been held up by the small relative size of the field, as well as low gas prices. This made it commercially challenging to construct a 240-320 km pipeline to send gas to Egypt, and then go through the costly process of converting it into liquefied natural gas (LNG). Low prices also mean that government revenue from the gas might be considerably lower than the oft-cited $9.3 billion, with some estimates putting it as low as just $0.6 billion. For the time being, there are no alternative viable export options for Aphrodite given the size of the field. Because of the Cyprus problem, companies cannot build a shorter 80 km pipeline to Turkey and then sell gas either directly to private power plants on the coast or feed it into European gas pipeline networks. With the cheaper, faster option excluded, the Republic of Cyprus government was forced to accept less favourable terms from companies before the first part of the deal to send Aphrodite gas to Egypt could be signed. Moreover, the government is now coming under pressure from Israel over the export deal. At the same time, risks (and therefore insurance and other costs) for companies operating in the Exclusive Economic Zone (EEZ) have been rising as a result of disputes connected to the Cyprus problem. A solution of the Cyprus problem would open up more options for gas exports, which would make a united Cyprus less vulnerable to pressures that are being created by the current narrow range of options for exports. While we have not made a separate forecast for natural gas, an increase in natural gas exploration, exploitation and production would have a positive impact on a range of sectors: mining and quarrying, manufacturing, construction and professional services, and would make ambitious forecasts about government revenue more realistic.

3.4 The opportunities for shipping

Shipping in the TCC is held back by the fact that Famagusta is not an internationally recognised port. After a solution of the Cyprus problem, EU funds can be expected to help the port upgrade to EU standards, allowing it to be a key port for trade with Turkey and the Middle East. The GCC would also benefit, as currently, any ship managed by a company in the GCC or under the Republic of Cyprus flag is unable to dock in Turkey. This disadvantage is borne out by

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statistics. The number of vessels arriving at unrecognised ports in the TCC reached 2,070 in 2017, while the number arriving at ports in the GCC reached 2,923, even though its economy is more than five times larger and the ports are internationally recognised. The cost of the Cyprus problem to the GCC shipping sector has been estimated by the industry at €100 million per year.\textsuperscript{31} Despite these obstacles, the Republic of Cyprus is the tenth largest merchant fleet in the world and the third largest fleet in the EU. It is also one of the largest ship-management centres in the EU and the sector contributes around 6% to GDP. The shipping sector is therefore resilient, underlining that it has plenty to take advantage of in a united Cyprus. Famagusta or Limassol could be a hub for container shipping in the region, for example. An expansion of the shipping sector would also create jobs in support sectors such as law and accounting.

\textbf{Figure 3.3}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{transport.png}
\caption{Transport* in the economy}
\end{figure}

\begin{itemize}
\item \textsuperscript{*}Includes storage for GCC and communications for TCC
\end{itemize}

\textit{Sources: Cystat; SPO.}

\section{3.5 The opportunities for professional services}

The GCC excels in professional services, a sector that in 2018 accounted for 8.5% of GDP and employed just under 30,000 people (6.9% of the workforce).\textsuperscript{32} Companies do business with, or headquarter themselves in, the GCC because of the common law system that is familiar to major financial centres such as London, New York, Hong Kong and Singapore; because of the business-friendly tax system; and because of lower costs than centres such as Luxembourg.


\textsuperscript{32} There are no equivalent statistics for the TCC.
Today, companies in Turkey generally do not have the option to headquarter themselves in the GCC. Even those that do will struggle to find Turkish-speakers among their staff. This would all change after a settlement. Both Turkish companies and regional headquarters of multinational companies would want to take advantage of the professional services offered by a Eurozone, EU member state, which can also offer plenty of Turkish-speakers. Lawyers and accountants in the GCC would therefore seek to create joint ventures with their counterparts in the TCC to tap the €65bn Turkish market. This means that job opportunities for accountants and lawyers in the TCC would also expand significantly, helping to reduce emigration of educated young Turkish Cypriots.

### 3.6 The opportunities for higher education

If the GCC has an advantage in professional services, the TCC has the advantage in higher education. Higher education is a good complement to tourism, as students tend to come during the winter months and tourists during the summer months. It also supports the real estate sector because it creates demand for accommodation. Despite issues with international recognition, higher education in the TCC is already a very significant contributor to the economy. These days, it brings in almost as much foreign-exchange revenue into the economy as tourism. In 2017 higher education brought in $766 million (19% of TCC GDP), compared with $865 million for tourism.

The number of foreign students in the TCC has grown rapidly, reaching 80,874 in 2016/17, up from 20,683 in 2003/04 (see Chart 3.4). Of that total, 55,329 were students from Turkey. Universities have shown themselves to be adaptable and innovative despite recognition issues, by teaching many programmes in English and linking programmes or faculties with internationally recognised institutes in Turkey and elsewhere. All the programmes offered by the universities in TCC are accredited by the Council of Higher Education in Turkey, which is part of the Bologna process. Programmes are continuously being reviewed and those that do not satisfy minimum requirements are disaccredited and taken off the accreditation list. In addition, some universities have also managed to get programme-based accreditations – for example, for engineering, business and economics – from ABET (an organisation that accredits programmes in applied and natural science, computing, engineering and engineering technology) and FIBAA (another European accrediting agency).

A World Bank study found that the rapid expansion of the higher education sector in the TCC has resulted in challenges related to both the quality of education and sociocultural issues. The same report recommends that for the higher education sector in the TCC to be

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35 For example, anecdotally, some institutes are said to be used as a conduit for unregistered labour or people trafficking.
sustainable, there must be a more coordinated and strategic approach to the sector, with the focus on the quality rather than the quantity of the students. A solution to the Cyprus problem would qualify TCC higher education institutions for EU structural funds and large academic subsidy programmes, which can help them concentrate more on research and development and also on building better institutions.

In the GCC the potential for higher education has been understood only more recently. While the number of students from abroad more than doubled between the academic years 2010/11 and 2016/17, the total had reached only 22,756 by 2016/17. There are no statistics on foreign-exchange earnings in higher education for the GCC, although the most recent data report that gross output for the higher education sector (including Cypriot students) was €185 million in 2014 – suggesting that its contribution to the economy is currently well below that of the TCC.

The long-term potential for the expansion of higher education in a post-settlement Cyprus is huge, especially if it is accompanied by investment in public transport to help students move around and measures to ensure that higher education courses match demand for skills in the labour market. Universities in the TCC will gain international recognition and universities in the GCC will benefit from the fact that Cyprus is already a known among non-EU nationals as a higher education centre. A Cyprus settlement will enable higher education institutions to diversify student markets more effectively. In addition to European Union funding options, higher education institutions will also be able to explore and implement more joint and double degrees. Nevertheless, being fully part of the Bologna process will be challenging for TCC institutions. While joining the process does not mean automatic closure of those that do not meet the Bologna criteria, it does mean that they will initially lose access to the exchange of students, staff and research funding. Our optimism for the post-settlement potential of the higher education sector comes from that fact that TCC universities have already grown substantially despite limited resources, severe competition from Turkish universities (over 200) and recognition issues. They will be able to attract more students with better high school qualifications not only from Turkey but also from the Middle East, Central Asia and Africa. However, in recognition of the fact that universities in the TCC will take time to adapt, the peace dividend we have forecast for higher education is small: only €88 million by 2040 (see Chapter 4).
3.7 The opportunities for wholesale and retail trade

The wholesale and retail trade sector is large in both communities, accounting for just under 10.9% of GDP in the TCC and 9.4% in the GCC, and it stands to gain the most from a solution of the Cyprus problem. The sector accounts for 17.6% of employment in the TCC and 16% of employment in the GCC. The primary reason why this sector will benefit from a settlement is because of the knock-on effects. Additional tourists will create new demand for hotel supplies, food and beverages, clothing and shoes, and gift items, while additional students will create demand for food and clothing (as well as accommodation). The opening up of the Turkish market to Greek Cypriots and the EU market for Turkish Cypriots will expand options for wholesalers, while an expanding economy will generate demand more generally for the sector via higher employment.

*(Figure 3.4)*

*Source: Cystat; SPO.*
4.1 Adjustments to the approach in 2014

The “peace dividend” is the difference between the expected size of the economy with a solution and the expected size of the economy without a solution. To calculate the size of the peace dividend, we have again adopted two approaches, as we did in the 2014 Cyprus Peace Dividend Revisited. The first is a forecast that looks at the opportunities in each individual sector, drawing on the arguments made in Chapter 3. With this approach, we estimate the effects of a solution on every sector of the economy. Calculating the peace dividend this way involves around 60,000 data points for each forecast (baseline, low and high). The second approach is a forecast based on growth in total factor productivity (TFP). The TFP forecast produces only a headline real GDP growth rate, while the sector forecast allows us to look at the peace dividend for each sector. We make identical estimates for 2019-20 (GCC) and 2018-20 (TCC) and then start the different methodologies for the sectoral and TFP forecasts from the year 2021 as the baseline (Year 1). Both approaches also use constant prices, using 2017 as a base.\textsuperscript{36}

To estimate growth rates we split our forecast into four stages. We first “pin” each stage to growth rates at the equivalent stage of the business cycle in the past, and then apply different discounts to those historical growth rates. We do this because one of the most important assumptions in both of our forecasts is that the growth rates in each of the four stages of our forecasts will never be as high as they were in the equivalent stages of the business cycle in the past. The global crisis of 2008, followed by the Eurozone crisis that also affected the GCC in 2013, has led to a significant increase in bank regulation and a greater emphasis on managing risk. This means that credit-driven property bubbles, while not totally impossible, will be more difficult to generate than in the past.

We have made one key adjustment in both of these approaches, following feedback on our 2014 forecast. Instead of focusing on a single number, we have produced a range forecast (low, baseline, high) for both the sectoral and the TFP forecast. This is closer to standard practice and acknowledges the fact that the size of the peace dividend depends on both initial assumptions and also on a range of policy decisions that could depress or enhance economic activity (see Chapter 5).

\textsuperscript{36} This was achieved by merging the national accounts in both communities to create a compatible dataset and then rebasing them to the year 2017.
4.2 The sectoral forecast: headline results

For the non-solution sectoral forecast, we assume that the economy in each community will grow from 2021 at the same pace as its most recent 15-year average. Average real GDP growth in this period was 1.9% for the GCC and 4.9% for the TCC.\(^{37}\) For the with-solution sectoral forecast, we have adopted a similar approach to our 2014 report, by splitting the forecast into four periods. Each of these periods is then referenced (“pegged”) to growth rates in similar stages of the business cycle in earlier years. However, and importantly, the growth rates from each of our reference periods are then discounted heavily to reflect the fact that we do not expect these kinds of growth rates to be reached again, owing to the above-mentioned changes in the global economy. A fuller discussion of the different discounts at different stages together with a table can be found in the Technical Appendix (Figure A1.1).

The all-island peace dividend

Under our three scenarios (baseline, low and high), the results for the peace dividend (GDP at constant prices with a solution minus GDP without a solution) are as follows.

**Figure 4.1**

<table>
<thead>
<tr>
<th>Peace dividend summary: sectoral all-Cyprus forecast</th>
<th>With solution</th>
<th>Without solution</th>
<th>Peace dividend (a)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Baseline scenario</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic size: GDP at constant prices (EUR million)</td>
<td>54,357</td>
<td>40,259</td>
<td>14,097</td>
</tr>
<tr>
<td>Incomes: GDP per capita at constant prices (EUR)</td>
<td>33,957</td>
<td>25,151</td>
<td>8,807</td>
</tr>
<tr>
<td>Growth: average real GDP growth rate 2021-2040 (%)</td>
<td>3.8%</td>
<td>2.3%</td>
<td>1.6%</td>
</tr>
<tr>
<td><strong>Low scenario</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic size: GDP at constant prices (EUR million)</td>
<td>49,902</td>
<td>40,259</td>
<td>9,642</td>
</tr>
<tr>
<td>Incomes: GDP per capita at constant prices (EUR)</td>
<td>31,174</td>
<td>25,151</td>
<td>6,024</td>
</tr>
<tr>
<td>Growth: average real GDP growth rate 2021-2040 (%)</td>
<td>3.4%</td>
<td>2.3%</td>
<td>1.1%</td>
</tr>
<tr>
<td><strong>High scenario</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic size: GDP at constant prices (EUR million)</td>
<td>59,683</td>
<td>40,259</td>
<td>19,424</td>
</tr>
<tr>
<td>Incomes: GDP per capita at constant prices (EUR)</td>
<td>37,285</td>
<td>25,151</td>
<td>12,134</td>
</tr>
<tr>
<td>Growth: average real GDP growth rate 2021-2040 (%)</td>
<td>4.3%</td>
<td>2.3%</td>
<td>2.0%</td>
</tr>
</tbody>
</table>

(a) Difference between the outcome with a solution and the outcome without a solution.

*Source:* Authors’ sectoral forecast.

---

\(^{37}\) 2009-2018 for GCC and 2008-2017 for TCC. In 2008-17 GCC growth averaged only 0.5% as it was still heavily influenced by the 2013 financial crisis.
How large can the peace dividend be?

- **All-CY baseline GDP forecast**: GDP is around €14 billion higher by 2040 at constant prices than without a solution.
- **All-CY low GDP forecast**: GDP is €9.6 billion higher by 2040 at constant prices than without a solution.
- **All-CY high GDP forecast**: GDP is €19.4 billion higher by 2040 at constant prices than without a solution.

The forecast results clearly show that, even in the low forecast scenario, a united Cyprus will be able to produce additional income, with a peace dividend of nearly €10 billion by 2040 (baseline forecast). This implies more jobs and better welfare for all the citizens of Cyprus.

**Figure 4.2**

![Graph showing All-Cyprus GDP (baseline sectoral forecast)](image)

*Source: Authors’ sectoral forecast.*

It is clear that, the higher the output of a united economy, the higher the per-capita income for everyone living on the island. The forecast results show that the impact on GDP per capita will be significant.

- **All-CY baseline GDP per capita forecast**: GDP per capita by 2040 is €8,807 higher at constant prices than without a solution.
- **All-CY low GDP per capita forecast**: GDP per capita by 2040 is €6,024 higher at constant prices than without a solution.
- **All-CY high GDP per capita forecast**: GDP per capita by 2040 is €12,134 higher at constant prices than without a solution.
The peace dividend in the GCC
A solution to the Cyprus problem will automatically expand the potential output level of the GCC economy, enabling it to produce more than what could have been produced without a solution. Under our three scenarios (baseline, low and high), the results for the peace dividend (GDP at constant prices with a solution minus GDP without a solution) are as follows.

- **GCC baseline GDP forecast**: GDP in the GCC by 2040 is €7.9 billion higher at constant prices than without a solution (see Figure 4.5).
- **GCC low GDP forecast**: GDP in the GCC by 2040 is €5.6 billion higher at constant prices than without a solution.
- **GCC high GDP forecast**: GDP in the GCC by 2040 is €10.5 billion higher at constant prices than without a solution.

Figure 4.3

![Graph showing GDP forecast](image)

Source: Authors’ sectoral forecast.

The utilisation of new potential will have positive impacts on GDP per capita as follows.

- **GCC baseline GDP per capita forecast**: GDP per capita by 2040 is €7,038 higher at constant prices than without a solution.
- **GCC high GDP per capita forecast**: GDP per capita by 2040 is €9,338 higher at constant prices than without a solution.
- **GCC low GDP per capita forecast**: GDP per capita by 2040 is €4,962 higher at constant prices than without a solution.

The peace dividend in the TCC
Access to both new products and input markets will enable the TCC economy to expand its production capacity, as it will benefit extensively from economies of scale. Under our three scenarios (low, baseline and high), the results for the peace dividend (GDP at constant prices with a solution minus GDP without a solution) are as follows.
How large can the peace dividend be?

- **TCC baseline GDP forecast:** GDP in the TCC by 2040 is €6.2 billion higher at constant prices than without a solution.
- **TCC high GDP forecast:** GDP in the TCC by 2040 is €9.0 billion higher at constant prices than without a solution.
- **TCC low GDP forecast:** GDP in the TCC by 2040 is €4.1 billion higher at constant prices than without a solution.

A solution to the Cyprus problem will enable Turkish Cypriots to join the high-income group of economies. The impact on GDP per capita is as follows.

- **TCC baseline GDP per capita forecast:** GDP per capita by 2040 is €12,942 higher at constant prices than without a solution.
- **TCC high GDP per capita forecast:** GDP per capita by 2040 is €18,672 higher at constant prices than without a solution.
- **TCC low GDP per capita forecast:** GDP per capita by 2040 is €8,503 higher at constant prices than without a solution.

Figure 4.4

![TCC: GDP per capita (baseline sectoral forecast)](chart)

*Source: Authors’ sectoral forecast.*

Under the three scenarios, by 2040, TCC incomes per capita at constant prices reach 88% of GCC incomes under the baseline forecast, 97% under the high forecast and 79% under the low forecast. Under a no-solution scenario, GDP per capita in the TCC would reach only 63% of GCC incomes by 2040, from 45% today.

### 4.3 Sector-by-sector results

In this section of the report, we outline the sources of growth by sectors. With this approach, we apply a bottom-up approach and construct the GDP of a united Cyprus. This enables us to see the effect of a solution on each sector of the economy and also to calculate the peace dividend generated by each sector. As stated in Chapter 3, a solution to the Cyprus problem
will increase economic opportunities for a number of reasons, including access to larger markets, greater interest from foreign direct investors, more EU and related funds and so on. Our sector-based forecasts show that the above-mentioned factors that will lead to expansion of economic activities on the island will benefit the most the sectors of wholesale and retail, tourism, transportation and storage, and education.

**Figure 4.5**

<table>
<thead>
<tr>
<th>Peace dividend summarised: baseline sectoral forecast</th>
<th>2017 Actual</th>
<th>2040 No solution</th>
<th>2040 With solution</th>
<th>Peace dividend in 2040</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>1,026</td>
<td>3,719</td>
<td>6,408</td>
<td>2,688</td>
</tr>
<tr>
<td>GCC</td>
<td>823</td>
<td>3,207</td>
<td>3,862</td>
<td>655</td>
</tr>
<tr>
<td>TCC</td>
<td>203</td>
<td>513</td>
<td>2,546</td>
<td>2,033</td>
</tr>
<tr>
<td>Wholesale &amp; retail trade</td>
<td>2,258</td>
<td>4,427</td>
<td>7,305</td>
<td>2,878</td>
</tr>
<tr>
<td>GCC</td>
<td>1,865</td>
<td>3,152</td>
<td>4,757</td>
<td>1605</td>
</tr>
<tr>
<td>TCC</td>
<td>393</td>
<td>1,275</td>
<td>2,548</td>
<td>1,273</td>
</tr>
<tr>
<td>Transportation &amp; storage</td>
<td>1,375</td>
<td>2,122</td>
<td>2,941</td>
<td>819</td>
</tr>
<tr>
<td>GCC</td>
<td>1,213</td>
<td>1,958</td>
<td>2,658</td>
<td>699</td>
</tr>
<tr>
<td>TCC</td>
<td>162</td>
<td>164</td>
<td>283</td>
<td>119</td>
</tr>
<tr>
<td>Accommodation &amp; food services</td>
<td>1,560</td>
<td>3,067</td>
<td>4,160</td>
<td>1,093</td>
</tr>
<tr>
<td>GCC</td>
<td>1,243</td>
<td>2,297</td>
<td>2,757</td>
<td>460</td>
</tr>
<tr>
<td>TCC</td>
<td>316</td>
<td>770</td>
<td>1,403</td>
<td>634</td>
</tr>
<tr>
<td>Professional, scientific &amp; technical</td>
<td>1,882</td>
<td>5,242</td>
<td>5,941</td>
<td>698</td>
</tr>
<tr>
<td>GCC</td>
<td>1,424</td>
<td>3,437</td>
<td>3,658</td>
<td>221</td>
</tr>
<tr>
<td>TCC</td>
<td>458</td>
<td>1,805</td>
<td>2,282</td>
<td>477</td>
</tr>
<tr>
<td>Education</td>
<td>1,287</td>
<td>1,806</td>
<td>1,894</td>
<td>88</td>
</tr>
<tr>
<td>GCC</td>
<td>1,109</td>
<td>1,545</td>
<td>1,583</td>
<td>38</td>
</tr>
<tr>
<td>TCC</td>
<td>178</td>
<td>261</td>
<td>311</td>
<td>50</td>
</tr>
<tr>
<td>GDP including others (sectoral forecast)</td>
<td>23,178</td>
<td>40,259</td>
<td>54,357</td>
<td>14,097</td>
</tr>
<tr>
<td>GCC</td>
<td>19,649</td>
<td>31,668</td>
<td>39,560</td>
<td>7,891</td>
</tr>
<tr>
<td>TCC</td>
<td>3,530</td>
<td>8,591</td>
<td>14,797</td>
<td>6,206</td>
</tr>
<tr>
<td>GDP per capita (sectoral forecast)</td>
<td>19,315</td>
<td>25,151</td>
<td>33,957</td>
<td>8,807</td>
</tr>
<tr>
<td>GCC</td>
<td>22,860</td>
<td>28,245</td>
<td>35,283</td>
<td>7,038</td>
</tr>
<tr>
<td>TCC</td>
<td>10,367</td>
<td>17,915</td>
<td>30,857</td>
<td>12,942</td>
</tr>
<tr>
<td>Real GDP growth rate 20-year average, % (sectoral forecast)</td>
<td>-</td>
<td>1.9%</td>
<td>3.1%</td>
<td>1.5%</td>
</tr>
</tbody>
</table>

Source: Statistical services and authors' forecasts.
How large can the peace dividend be?

Figure 4.6

All-Cyprus: Wholesale & retail trade (baseline sectoral forecast)  
(EUR million at constant 2017 prices; scaled y-axis)

Source: Authors’ sectoral forecast.

Wholesale and retail trade benefit the most
We find that the direct positive impact, calculated as the peace dividend generated by the wholesale and retail trade sector, will be as much as €2.9 billion by 2040. It is this sector that will supply the inputs to the leading sectors, i.e., tourism, higher education and construction. We expect the two relatively small economies to integrate very quickly, creating substantial efficiency gains that will improve both consumer and producer surpluses. A solution to the Cyprus problem will not only help the TCC access new markets and trade directly with the EU, it will also create a new market destination for the GCC, namely the large Turkish economy, which has a customs union with the EU for non-agricultural goods. Overall, wholesale and retail trade represent a high share in both the TCC and GCC economies, which is why it is the sector that most benefits from a solution.

Construction
A solution to the Cyprus problem will require a large number of construction projects. This will involve island-wide infrastructure projects, the rehabilitation of Varosha, housing for those who may relocate as a result of territorial adjustment, and upgrading the ports, especially in the TCC. Construction is a sector that is highly interconnected with other sectors and typically generates a tremendous amount of income through the multiplier effect for these other sectors. We forecast that by 2040 the construction sector will grow to €6.4 billion island wide – €2.7 billion higher than without a solution. Much of the estimated peace dividend for the construction sector will be generated in the TCC economy, which has a quite high growth potential. We estimate the TCC construction sector to grow to €2.5 billion with a solution, five times more than without a solution.
Tourism
Given that there are opportunities that have not been fully utilised in the tourism sector, we expect that this sector will respond positively to a solution on the island. The elimination of the conflict and the de facto barriers across the Green Line will make Cyprus a more attractive tourism destination in the region. A united Cyprus will be able to provide a wide range of tourism services, such as upgraded religious tourism, agro tourism and health tourism, and to continue expanding the existing sea, sand, sun and other entertainment tourism. We forecast a €1 billion peace dividend by 2040. This estimate represents only the sector’s direct extra value-added with a solution. However, since the tourism sector relies on many other sectors, such as agriculture and manufacturing, and also has complementary services within the supply chain, such as transportation, its multiplier effect is high, therefore it will also create indirect value-added through other sectors. Since the tourism sector in the northern part of the island has not been developed as much as the south, the TCC economy is expected to benefit more in relative terms. We forecast that the tourism peace dividend in the TCC will be €634 million by 2040, compared with €460 million for the GCC. The total value-added created by this sector is expected to be €4.2 billion by 2040 across the island.
How large can the peace dividend be?

**Figure 4.8**

*Source: Authors’ sectoral forecast.*

**Transportation and storage**

The growth in the tourism sector, together with the expansion in the wholesale/retail trade and the construction sectors, will have a direct impact on the transportation sector (airlines and cruise ships). In addition, the opening of the GCC shipping sector to Turkey, which is a very big market, will bring additional value-added to the sector. We forecast that transportation will grow to €2.9 billion by 2040, generating a peace dividend of €819 million. Much of the benefit of a solution will accrue to the GCC economy for this sector.

**Figure 4.9**

*Source: Authors’ sectoral forecast.*
**4.4 The boost to employment**

Stronger economic growth would also be accompanied by faster job-creation. How many jobs will be created depends on a large range of factors, such as labour force participation rates, the relationship between GDP and productivity, population growth, and the impact of technology. Our projections for employment are therefore tentative, and we have only attempted a forecast for the first 10 years (from 2021 to 2030). We tentatively expect a solution of the Cyprus problem to create around 100,000 more jobs in the first 10 years than the status quo. Around 30,000 of these new jobs would be created in the tourism sector, 18,000 in wholesale and retail trade, 10,000 in construction and around 6,000 in the airline and shipping sectors.

**Figure 4.10**

<table>
<thead>
<tr>
<th>Preliminary forecast: additional jobs created by a solution by Year 10</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tourism (accommodation &amp; food services)</td>
<td>31,321</td>
</tr>
<tr>
<td>Wholesale &amp; retail trade</td>
<td>18,423</td>
</tr>
<tr>
<td>Construction</td>
<td>9,495</td>
</tr>
<tr>
<td>Transportation (shipping &amp; airlines)</td>
<td>6,333</td>
</tr>
<tr>
<td><strong>Total boost to employment by Year 10 including others</strong></td>
<td>119,901</td>
</tr>
</tbody>
</table>

*Source: Authors’ forecasts.*

**4.5 Tests for sectoral forecasts: sensitivity and robustness**

**Sensitivity test**

We also applied a sensitivity test to check the impact on our overall forecast of different discounts to our reference-period growth rates. The sensitivity test enables us to see how risky our forecast is with the assumptions set. The test has been carried out for all-Cyprus GDP and per-capita income with a solution.

The sensitivity analysis shows that, if the “discount” falls below 50%, then the GDP of a united Cyprus will be less than €40 billion by 2040, and will therefore be below the level of GDP without a solution. In other words, if GDP growth turns out to be less than 50% of the reference year’s growth rates, the solution will not generate any peace dividend. As for GDP per capita, the test indicates that per-capita income is sensitive to the growth of the economy. We find that when growth in GDP is less than 50% of the reference-year growth rates, the per-capita income will not be greater than our estimated per-capita income without a solution. The full test results are presented in the separate Technical Appendix (Tables A1.2, A1.3 and A1.4).

We also carried out a two-way sensitivity test to see what the discounted peace dividend will be in 2020. In other words, we attempted to find the value of the peace dividend in 20 years’ time today. We find that the net present value of the peace dividend is €78 billion in 2020 under our baseline forecast. Alternatively, if post-solution real GDP growth is only 45% of the reference-year growth rates, the discounted peace dividend will be negative. The results are presented in the Technical Appendix (Figure A1.4).
Secondly, we also tested how sensitive the peace dividend is to the discount rate used to find the present value of the forecasted dividends. The results show that the peace dividend is not as sensitive to the change in the discount rate as it is to the growth rate of GDP. Overall, the higher the GDP growth, the larger the peace dividend; the higher discount applied, the lower the peace dividend.

**Robustness test**

In order to test the validity of our sectoral forecasts, we have applied what are known in academia as Monte Carlo simulations. This robustness test model enables us to find the probability of reaching the same level of GDP that we produced in our baseline forecast. The simulation has been conducted on the forecasts of all-Cyprus, the GCC and the TCC.

The simulation results for all-Cyprus show that the forecast mean is €54.2 billion, with a median of €54.3 billion and standard deviation of €2.3 billion. The simulation also shows that the minimum is €42 billion and the maximum that can be reached, given the assumptions, is €63 billion. The cumulative probability of the simulation results shows that there is 10% probability that the GDP will be less than or equal to €51 billion, and a 40% probability that it will be less than or equal to €53.6 billion. The model also estimates that the probability of reaching at least €54.2 billion (our baseline forecast) is 50%. Overall, the robustness results are very close to the forecast GDP values; this indicates that the model used is valid. All simulation results are presented in the separate Technical Appendix under section A1.

**4.6 Total factor productivity forecast**

**Why total factor productivity is important**

As we argued in *The Cyprus Peace Dividend Revisited*, total factor productivity (TFP) is particularly important for middle- to high-income economies because it is intrinsically linked to how an economy can create, adopt and adapt technology. An economy that can produce more output with the same (or fewer) resources will enjoy growth in TFP. An increase in TFP leads to permanent increases in income (GDP), and makes the economy less vulnerable to changes in the business cycle. Our primary hypothesis is that uniting Cyprus in an integrated economy will increase economies of scale and therefore substantially reduce the unproductive use of resources.

**Measuring historical total factor productivity**

In order to make a forecast based on TFP, we first need to calculate what the TFP growth rate has been in the historical period for each community. We did this using historical data for growth in GDP, employment and net fixed capital investment. This produces an estimate for growth in TFP, which is also known as the Solow Residual. A fuller explanation of our assumptions can be found in the Technical Appendix (Figure A2.1).

The headline results are presented in Figure 4.11. The GCC economy has seen negative growth in total factor productivity over the past 20 years, while the TCC economy has seen only modest growth. If we shorten the period to 15 years, the differences are even more stark, with a larger negative TFP growth rate for the GCC.
Delivering the Cyprus peace dividend

Figure 4.11

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total factor productivity</td>
<td>0.12%</td>
<td>-0.83%</td>
</tr>
</tbody>
</table>

Source: Authors’ estimates inferred from Cystat and SPO.

Financial crises, construction and the impact on TFP

The finding that productivity in the GCC economy has been negative is not surprising given that our data sample includes the period around 2013. Total factor productivity typically takes a severe knock during periods of financial crisis and in their aftermath. This was one of the messages of a 2018 speech 38 by the IMF’s chief economist at the time, Maurice Obstfeld, about the global productivity trends following the crisis. Mr Obstfeld went on to present the main explanations from various research publications as well as policy prescriptions in a post-crisis world. The tightening of credit conditions reduces investment in intangibles (non-physical assets such as intellectual property), which in turn reduces TFP growth. Furthermore, in the post-crisis economies, “zombie” companies tended to stick around instead of releasing their resources to younger, more dynamic firms. 39 Another interesting finding cited in the speech was that construction activities are associated with lower TFP growth. Construction booms and busts have unfortunately been an important feature of the economies of both communities during the 21st century.

Following the global financial crisis, several advanced economies witnessed a sharp deterioration in TFP growth. This effect was bound to be more pronounced in the case of the GCC, given the traumatic experiences of 2013 and its aftermath.

TFP in a united Cyprus

However, economies return to more normal conditions as the distance from the financial crisis becomes greater. This, coupled with the positive effects of a potential reunification, argues for a sharp rebound in TFP growth for both the TCC and GCC economies. The increase in confidence, the lifting of the uncertainty, the expansion of opportunities for investment and trade and the economies of scale are some of the main factors that should fuel the increase in productivity assumed in our forecast. As was also stated in the 2014 Peace Dividend report, this increased productivity has been the international experience in the case of ethnic conflicts that have


been settled; likewise, it has been a key assumption underlining models of economic performance under potential reunification.

As in the sectoral forecast, we produced three forecasts – baseline, low and high – by pegging growth in the physical output (GDP) per worker to different phases of the business cycle in previous periods, and then discounting them heavily. This ensures that our assumptions are cautious. The full details are explained in the Technical Appendix (section A2).

The key findings of the updated TFP model were that a solution of the Cyprus problem would gradually lead to higher productivity and that, under modest assumptions regarding capital investment, a solution would lead to a significantly higher island-wide growth rate over the 20 years following a solution. Under our baseline TFP scenario, all-island real GDP growth would be on average 3.8% with a solution, compared with only 2.3% without a solution. The boost to GDP at constant prices would reach almost €14 billion under the baseline scenario, while a solution would also lead to significant convergence of incomes, with Turkish Cypriot incomes reaching 83% of Greek Cypriot incomes by 2040.

It is therefore reassuring that the potential for the peace dividend still exists and can be harnessed. The findings of the previous peace dividend study have not been invalidated by either the passage of time or the difficult years that the GCC economy endured in the aftermath of 2013. The main reason why the peace dividend is a smaller than in our previous forecast is because of the €2 billion upward revision to historical GDP in the GCC. This creates a higher baseline from which to grow. The long-term effects of the global financial crisis have also played a part.

**Figure 4.12**

<table>
<thead>
<tr>
<th>Peace dividend summary: TFP all-Cyprus forecast</th>
<th>With solution</th>
<th>Without solution</th>
<th>Peace dividend (a)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Baseline scenario</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic size: GDP at constant prices (EUR million)</td>
<td>54,089</td>
<td>40,259</td>
<td>13,830</td>
</tr>
<tr>
<td>Incomes: GDP per capita at constant prices (EUR)</td>
<td>33,790</td>
<td>25,151</td>
<td>8,640</td>
</tr>
<tr>
<td>Growth: average real GDP growth rate 2021-2040 (%)</td>
<td>3.8%</td>
<td>2.3%</td>
<td>1.5%</td>
</tr>
<tr>
<td><strong>Low scenario</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic size: GDP at constant prices (EUR million)</td>
<td>52,573</td>
<td>40,259</td>
<td>12,314</td>
</tr>
<tr>
<td>Incomes: GDP per capita at constant prices (EUR)</td>
<td>32,843</td>
<td>25,151</td>
<td>7,693</td>
</tr>
<tr>
<td>Growth: average real GDP growth rate 2021-2040 (%)</td>
<td>3.7%</td>
<td>2.3%</td>
<td>1.4%</td>
</tr>
<tr>
<td><strong>High scenario</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic size: GDP at constant prices (EUR million)</td>
<td>55,710</td>
<td>40,259</td>
<td>15,451</td>
</tr>
<tr>
<td>Incomes: GDP per capita at constant prices (EUR)</td>
<td>34,803</td>
<td>25,151</td>
<td>9,653</td>
</tr>
<tr>
<td>Growth: average real GDP growth rate 2021-2040 (%)</td>
<td>4.0%</td>
<td>2.3%</td>
<td>1.7%</td>
</tr>
</tbody>
</table>

(a) Difference between the outcome with a solution and the outcome without a solution.
Source: Authors’ TFP forecast.
4.7 The average of both forecasts

Taking the average of the two methodologies (the mean for constant prices and arithmetic average for growth rates), we find that a solution of the Cyprus problem could boost average incomes (per-capita GDP) by between around €6,800 and €11,000 compared with no solution. A solution would raise overall GDP by between roughly €11 billion and €17.4 billion after 20 years. Under our baseline scenario, real GDP growth would be, on average, 3.8% with a solution and only 2.3% under the status quo.

Figure 4.13

<table>
<thead>
<tr>
<th>Peace dividend summary: all-Cyprus forecast (average of sectoral and TFP forecasts)</th>
<th>With solution</th>
<th>Without solution</th>
<th>Peace dividend (a)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Baseline scenario</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic size: GDP at constant prices by 2040 (EUR million)</td>
<td>54,223</td>
<td>40,259</td>
<td>13,964</td>
</tr>
<tr>
<td>Incomes: GDP per capita at constant prices by 2040 (EUR)</td>
<td>33,874</td>
<td>25,151</td>
<td>8,723</td>
</tr>
<tr>
<td>Growth: average real GDP growth rate 2021-2040 (%)</td>
<td>3.8%</td>
<td>2.3%</td>
<td>1.5%</td>
</tr>
<tr>
<td><strong>Low scenario</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic size: GDP at constant prices by 2040 (EUR million)</td>
<td>51,237</td>
<td>40,259</td>
<td>10,978</td>
</tr>
<tr>
<td>Incomes: GDP per capita at constant prices by 2040 (EUR)</td>
<td>32,009</td>
<td>25,151</td>
<td>6,858</td>
</tr>
<tr>
<td>Growth: average real GDP growth rate 2021-2040 (%)</td>
<td>3.5%</td>
<td>2.3%</td>
<td>1.2%</td>
</tr>
<tr>
<td><strong>High scenario</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic size: GDP at constant prices by 2040 (EUR million)</td>
<td>57,697</td>
<td>40,259</td>
<td>17,438</td>
</tr>
<tr>
<td>Incomes: GDP per capita at constant prices by 2040 (EUR)</td>
<td>36,044</td>
<td>25,151</td>
<td>10,893</td>
</tr>
<tr>
<td>Growth: average real GDP growth rate 2021-2040 (%)</td>
<td>4.1%</td>
<td>2.3%</td>
<td>1.8%</td>
</tr>
</tbody>
</table>

(a) Difference between the outcome with a solution and the outcome without a solution.

Source: Authors’ forecast.

GCC and TCC growth rates

Under our baseline sectoral forecast, the GCC would grow on average by 3.1% with a solution and 1.9% without one. The TCC would grow on average by 6.6% with a solution and 3.9% without one, lifting per-capita incomes to 85% of GCC incomes by the end of the forecast period (see Figure 4.14). We also conducted Monte Carlo simulations on the forecast for all-Cyprus, the GCC and the TCC, and these confirmed that our forecasts lie within the probability range (in other words, within the bounds of possibility).

The forecast TCC growth rate is high because of what has happened in historical periods when a settlement was expected. In 2003, the year before the twin referendums on uniting the island, real GDP in the TCC grew by 10.6% as the property market boomed. It continued to grow, by an astonishing 14.2% in 2004, 13.8% in 2005 and 12.7% in 2006, because real estate developers initially assumed that the rejection of the plan by Greek Cypriots meant that there was no longer a risk of litigation over property. Court cases eventually brought this speculation...
to a halt.\footnote{The main one being the “Orams” case at the European Court of Justice, Case C-420/07, \url{http://curia.europa.eu/juris/celex.jsf?celex=62007CJ0420&lang1=en&type=TXT&ancre=}.} We do not expect these kinds of growth rates to be repeated. Nevertheless, the combination of a small, less-developed economy, the very steep decline in lending rates that would come about as a result of the formal adoption of the euro in the TCC, the lifting of legal impediments on property, and investment to upgrade infrastructure such as ports, will, we believe, lead to very strong growth rates in the middle of the forecast period, before they moderate towards the end. Indeed, policymakers will need to be careful to manage the risks of boom and bust.

Figure 4.14

<table>
<thead>
<tr>
<th>Peace dividend summary: baseline forecast</th>
<th>GCC</th>
<th>TCC</th>
<th>United CY</th>
</tr>
</thead>
<tbody>
<tr>
<td>(mean of sectoral and TFP forecasts)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Economic size: GDP at constant prices by 2040 (EUR million)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDP at constant prices with solution</td>
<td>39,762</td>
<td>14,461</td>
<td>54,223</td>
</tr>
<tr>
<td>GDP at constant prices without solution</td>
<td>31,668</td>
<td>8,591</td>
<td>40,259</td>
</tr>
<tr>
<td>Peace dividend for the size of the economy</td>
<td>8,094</td>
<td>5,870</td>
<td>13,964</td>
</tr>
<tr>
<td><strong>Incomes: GDP per capita at constant prices by 2040 (EUR)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDP per capita at constant prices with solution</td>
<td>35,464</td>
<td>30,156</td>
<td>33,874</td>
</tr>
<tr>
<td>GDP per capita at constant prices without solution</td>
<td>28,245</td>
<td>17,915</td>
<td>25,151</td>
</tr>
<tr>
<td>Peace dividend for average incomes</td>
<td>7,219</td>
<td>12,240</td>
<td>8,723</td>
</tr>
<tr>
<td><strong>Growth: average real GDP growth rate 2021-2040 (%)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Real GDP growth with solution</td>
<td>3.1%</td>
<td>6.6%</td>
<td>3.8%</td>
</tr>
<tr>
<td>Real GDP growth without solution</td>
<td>1.9%</td>
<td>3.9%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Peace dividend for growth</td>
<td>1.2%</td>
<td>2.6%</td>
<td>1.5%</td>
</tr>
<tr>
<td><strong>Relative incomes: TCC GDP per capita as % of GCC by 2040</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TC GDP per capita as % of GCC with solution</td>
<td>-</td>
<td>85.0%</td>
<td>-</td>
</tr>
<tr>
<td>TC GDP per capita as % of GCC without solution</td>
<td>-</td>
<td>63.4%</td>
<td>-</td>
</tr>
</tbody>
</table>

(a) Difference between the outcome with a solution and the outcome without a solution.

Source: Authors’ sectoral forecast.
In Chapter 4 we provided low and high estimates for the size of the peace dividend. This is because much will depend on getting the starting conditions right. Below we argue that the peace dividend can be greatly enhanced by a focus on four key issues: solid institutions; a sensible approach to transition periods; anticipating the key winners and losers; and, as research has shown, by enhancing gender equality.

5.1 The importance of solid institutions

Boosting confidence: demonstrating bi-communal can work

During the last few years, there has been increasing attention on the role of institutions – political and economic – in driving countries forward or, alternatively, keeping them stagnant. It is therefore crucial to consider the set of institutions that might operate in a reunited Cyprus, and to anticipate the principles by which they would deliver enduring prosperity to the citizens of the new federal state.

First, all new federal institutions must provide stability and reduce uncertainty. A not insignificant percentage of both communities has severe doubts that a power-sharing structure will endure the test of time. Indeed, the island’s modern history, with its inter-communal strife and failure to share power successfully between the two communities, is a ghost that could haunt the new federal government, at least during the first few years of reunification. At some point in the future, the citizens of a reunited Cyprus might take for granted and expect their bi-communal state to work in a functional and smooth manner, but the early stages of reunification could well be a testing period.

A worthy goal therefore is to convince both local inhabitants and foreign investors that the new federal structure will be durable and robust. This requires considerable preparation, and the two communities must show that they can successfully cooperate, and more importantly, that they have a common vision and strategy with respect to economic issues.

How can confidence in a solution be instilled – before there is a solution? Careful preparation by bi-communal teams is one means to enhance trust. Bi-communal teams and institutions could undertake detailed and in-depth studies of the economic conditions, opportunities and challenges that will exist post-reunification. At the same time outside organisations such as
the IMF and the World Bank could also lend a hand in this effort. As it is key that there is transparency, the results of this work must then be well and widely disseminated to the public. This preparation will help businesses and individuals understand the eventual reality better, which will substantially reduce the inevitable uncertainties while also maximising the opportunities and ways to take advantage of them.

Although there is an interplay between the economic and other aspects of a settlement of the Cyprus problem, the “economy chapter” is one in which there has been less friction at the negotiating table compared with other more politically sensitive chapters. Increased cooperation between the two communities on economic issues offers an opportunity to prepare for a settlement without the need for compromises on major issues that could potentially extract an immediate political cost to one or both leaders participating in the process.

Another important and relatively easy way to bolster confidence and prepare for post-settlement federal and constituent state institutions is to increase coordination in areas of common interest that lie outside the so-called “heart” of the Cyprus problem. These include the environment, antiquities, disease control, renewable energy, crime, agricultural standards, culture, sport and other areas. Indeed, many of these already have some degree of bi-communal collaboration. Cooperation here and a results-oriented approach could lead even sceptics to revise their position that future bi-communal federal structures are doomed to failure by way of repeating the unfortunate experience of the past. Technical committees on many of these matters have existed since 2008 but with the exception of the Bicommunal Technical Committee on Cultural Heritage and the more recently established Committee on Education, their work is largely unknown to the public. Indeed, it is noticeable that the most well-known Technical Committees are those that have been supported with EU or other funding. It is crucial that the work of such bi-communal entities is well-publicised and that the leaderships of the two communities actively back this work in advance of a settlement. The current technical committees offer a good starting point from which to expand and publicise their work.

**Post-solution**

Well-functioning and strong institutions will ensure that certain necessary prerequisites are in place, and these will, in their turn, facilitate growth and economic development that will benefit all citizens in a united Cyprus. Such institutions will ensure the rule of law across the island and will guarantee that property rights are fully respected. They will facilitate innovation while also

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recognising the process of creative destruction – a necessary feature of a flexible market economy. Economic opportunities must be open and made available to all citizens and not only to those with links to government or political parties; and special interest groups must not be placed above the common good. To ensure that institutions do not abuse their power, a strong system of checks and balances must be put into place.

While such conditions are the norm in many countries, in a recently unified country there could easily be worries or even suspicions that one community would try to take unfair advantage of the other – whether through the passage of some measure or law, hiring procedures, etc. Such mistrust could lead to the blockage of measures. It is therefore important to understand that such conflicts may inevitably arise, and so both communities must agree on a way to handle this. In this regard, it is reassuring to note that in the run-up to Crans Montana, the two sides had agreed on deadlock-breaking mechanisms in the executive and the legislature.42 Yet, once again, we note the importance of transparency and dissemination of information: this process should be fully explained to all community members so that fears of repeating the past are alleviated. Good communication and the building of trust, as well as a realistic spirit of compromise and understanding, will be essential to stave off any early crises.

It is also important to prevent the two communities from engaging in unhealthy competition such as a “race to the bottom” in terms of tax rates, lax regulations or unfair incentives (see section 5.2 below).

The fact that Cyprus is a member of the European Union is a positive factor that can help reunify the country more quickly, as it will almost eliminate any sort of “economic friction” in economic, trade, services and other business transactions taking place between the two communities. This should in theory lead to a reunited economy much more quickly compared to the pre-EU period.

**The role of political power in the economy**

Another issue that must be examined is the role of institutions in relation to the economy. Specifically, it is important to understand whether there is or can be an environment that fosters broad economic growth across sectors and segments of society, provides equal opportunities, a level playing field, rule of law and a flexible economy.

In their 2012 book *Why Nations Fail*, Acemoglu and Robinson explain the success or failure of a nation’s economic development as a factor of its political institutions and their role in the economy.43 They concluded that for a nation to develop a sound economic programme a number of factors are key: the institutions must be accountable and inclusive (as opposed to

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42 Interview with Greek Cypriot negotiator Andreas Mavroyiannis with the Cyprus Broadcasting Corporation (CyBC), 16 September 2016, when he said, “The deadlock-breaking mechanism described has been agreed for the executive and the legislature” (author’s translation).

Delivering the Cyprus peace dividend

extractive); there must be a level playing field where entrepreneurship and innovation thrive; there is assurance that “nobody is above the law;” there is full respect for property rights; and there is a fair and efficient justice system to enforce the law. Countries that lack these conditions languish and fail to live up to their potential. The authors emphasise inclusive institutions – those that are broadly representative and operate for the benefit of the many. They condemn extractive institutions, which benefit the elite and some privileged sectors at the expense of others; moreover, such institutions discourage change and dynamism.

They further argue that periods of rapid economic development and growth (e.g., the state-directed industrialisation of the Soviet Union in the period 1930-1960) are not a viable alternative formula for economic success: in the long run such policies tend not to stand the test of time. The countries that consistently top the competitiveness charts (see Chapter 2) are countries with inclusive institutions. Interestingly, the authors also cite the failure of many newly post-colonial countries to develop an effective set of institutions, which resulted in many years of bad governance and underperformance. The emergence of a certain type of institution is a complex process – and can be ascribed as much to historical and geographic accident as to centuries-long cultural and political forces.

The two communities in Cyprus have traditionally followed a mixed economic model in which the public sector plays a major economic role. As a result, the public sector is also quite active in assisting and promoting activities and sectors that outperform other sectors that do not receive such an “artificial” boost. For example, following EU accession in 2004, the GCC actively pursued a strategy to become an international business services centre. The main catalyst for achieving this goal was setting the domestic corporate tax rate at 10%, although the effective rate of taxation was higher when the deemed dividend tax was considered. It was primarily the low corporate tax rate (it is still low now at 12.5%) that attracted foreigners to do business in the GCC. Those who benefited most were the professional business services, such as attorneys, accountants and other business administration services, as well as the banking sector, which saw a huge influx of deposits. The low corporate tax rate became the main “tool” with which to attract foreign capital and it played a central role in boosting activity in the business services sector. After all, having one of the lowest corporate tax rates in the EU constitutes a significant advantage by itself. However, it was essentially the result of a government decision that allowed it to avoid the “heavy lifting” required to build a competitive advantage vis-à-vis other countries — i.e., by raising competitiveness and productivity via structural reforms. It is not impossible that following a future reunification, the government would resort to similar “quick fix” solutions, which would not provide the right incentives for the island to eventually reach its full economic potential.

44 The corporate tax rate for the former “offshore” companies was raised from 2.5% and harmonised with domestic companies, which saw the corporate tax rate cut.
In a similar way, the citizenship-for-investment (“passport”) programme, which was enacted in 2013, played a not insignificant role in lifting the GCC out of recession and restoring economic vitality. It played a crucial role in revitalising the hard-hit and indebted property developers, while also providing a powerful boost to the professional services sector made up of attorneys, accountants and other business consultants. Again, the programme was designed to be one of the most attractive in the EU – particularly with respect to the speed and residency criteria for receiving a passport.45

The year 2013 of course was a very difficult one for the GCC, when it had to accept the depositor haircut and the sign the Memorandum of Understanding (bailout agreement) with international creditors. The economy needed all the help it could get. However, both measures – the low corporate tax rate and the citizenship by investment programme – are indicative of government reliance on legislative incentives to attract foreign investment and boost growth, to the detriment of other types of economic reforms that would make the economy more flexible, more competitive, more stable, more attractive to investors and which would raise productivity in the long run.

It is also worth noting that not only do the two communities exhibit a dependence on the public sector and its initiatives to drive the economy forward, but the public sector also clearly offers superior terms of employment – compared to the rest of the economy – for a significant part of the working population.

This is significant for two reasons. First, we must question whether this type of state-incentivised economic growth can continue successfully to yield economic growth and development in the long run in a reunified Cyprus. Second, if in either community political power is translated into substantial economic power, and this also includes the power to choose economic winners, this is key to understanding how a power-sharing relationship will be seen. Under such a scenario, it would likely be necessary first to build substantial trust before power sharing could take place. This underlines the importance of our argument for bi-communal cooperation and preparation in advance of a settlement.

5.2 Best approaches to transition periods

Transitional periods are a sensitive issue in the negotiations to solve the Cyprus problem. For a variety of reasons, businesses in both communities are anxious about the new competition that will result from a settlement. There are also concerns about social or economic “dumping” – where businesses in one community can sell at lower prices because they might be held to lower standards. At the same time, however, it appears there is a political imperative to implement the settlement as soon as possible after positive referendum results in both communities. Given that EU’s acquis communautaire (body of EU law) was suspended in the TCC after Cyprus joined the EU in 2004, the two sides acknowledged in the negotiations that the TCC would require transitional arrangements, with the following two basic objectives in mind.

- To ensure that the adaptation and implementation of the acquis is achieved in the shortest time possible, without creating any distortions in the economy or significant social problems.
- To help minimise the economic differences and the income inequality between the two communities.

The main principle of these transitional periods are: they are of fixed duration and limited in scope; they are based solely on technical grounds. Thus, the transitional period should be custom-designed to support the relatively weaker economy both financially and technically. Technical transitional periods should thus be considered for:

- Very specific elements of the four freedoms of the EU single market
- Fiscal policy (in particular rules on balances)
- The financial sector

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1. Elements of the four freedoms of the EU single market

**Goods.** The main principle of the EU single market is that there should be no restrictions on, or barriers to, the free movement of goods throughout the island upon the entry into force of the settlement agreement. At the same time, however, there will be a need for an assessment of locally manufactured goods by the European Commission to determine the scope and length of any transitional periods, including the harmonisation gap during the transitional period. Based on this assessment, TCC businesses should be given the necessary financial support and technical assistance to help them harmonise and adopt the *acquis* as quickly as possible. For TCC businesses that import goods from outside the EU customs territory, we suggest a maximum one-year transitional period.

**Capital.** As for capital, there should be free movement across the island insofar as this does not prejudice agreements made in the context of a settlement (which might affect financial services – see below) and with the common understanding that constituent states will be responsible for regulating property in line with the terms of the settlement agreement. Here it should be noted that in negotiations just prior to July 2017 the two sides had converged (agreed in principle, subject to “nothing is agreed until everything is agreed”) on the principle of the right to purchase property anywhere, with only limited potential restrictions as a backstop in case of very large purchases.47

**Services.** The right of establishment and the freedom to provide services constitutes one of the four fundamental freedoms of the EU single market and should be implemented from the first day of the agreement without prejudice to the terms of the settlement agreement. Again, the two sides had earlier converged on the principle of the right to provide services anywhere. Some services (such as education) would be areas over which constituent states would have competence.

**People.** The free movement of people across the island without barriers is expected to generate more economic activity though shopping, employment, etc. Recognising that Cyprus is home to many foreign workers as well as foreign students, in the process of implementation of the settlement agreement, it will be important to ensure that residency rights do not create labour shortages or difficulties for the higher education sector, which is one of the most important sectors in the TCC economy.48

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47 In an interview with CyBC on 15 September 2016, the GC negotiator, Andreas Mavroyiannis, said that the freedom to acquire property would be defined in the constitution. However, for a transitional period, in cases of very large purchases, authorisation might be needed from the constituent state concerned. In an interview with the Turkish Cypriot leader, Mustafa Akinci, by Turkish Cypriot journalists broadcast by BRT2 among others on 4 November 2016, Mr Akinci said that property would be regulated by the constituent states. (Sources: authors’ own records.)

48 While it is beyond the scope of our report, ensuring the rights and safety of other non-EU nationals (for example from the Middle East and Africa) is also an issue that needs to be addressed on both sides of the island.
Safeguards. For an agreed transitional period it is advisable that there are safeguard measures, which would be introduced by the federal government and in consultation with the European Commission, if unforeseen developments cause serious difficulties to the economy in one or both communities.

2. Fiscal policy and fiscal balance

It is a longstanding convergence in the negotiations that indirect taxes would be under the competence of the federal government.\(^{49}\) Within the overall objective of no tax competition across the island, there could be a limited transitional period for the application of VAT, for example, for pre-booked tourist accommodation. Since electricity is effectively non-tradeable, this could also apply to electricity charges.

The implementation of a settlement will result in one-off expenditures. For this reason, the implementation of the EU’s Stability and Growth Pact requirement for a balanced budget over the medium term must be allowed enough flexibility to ensure that the federal government need not find itself having to make cutbacks at the expense of necessary new investment in infrastructure and EU harmonisation. For similar reasons, and as agreed in the negotiations, for a transition period the federal government would need to make transfers to the constituent states for infrastructure investment in the areas most affected by the settlement. As has been widely reported, during the negotiations the two sides have agreed that a portion of federal government revenues would be allocated to the TCC until GDP per capita reaches 85% of GCC levels.

3. Financial sector

The main transitional issue for the TCC banking system will be the replacement of the Turkish lira with the euro in the TCC. This will involve a great many back operations that might not be noticed by the general public, as ordinary citizens and small businesses are already used to handling multiple currencies, both in cash and at the bank. A transition period of one year maximum should suffice for transferring accounting systems, etc.

The bigger issue will be for the new federal government to meet the many and growing requirements of the eurozone banking system in order to be fully part of the European System of Central Banks (ECSCB). In the period up to 2017 the ECB and IMF gave technical advice to the negotiating teams on how to achieve this and the ECB and European Commission will obviously be closely involved in transitioning the banks to the new system. Here it should be noted that banks in the TCC are highly liquid, both for local currency and foreign exchange. They hold 1.8 times more in foreign-currency deposits than in foreign-currency loans, for example, therefore the risk of a liquidity crunch should be low. Other issues will include

\(^{49}\) See, \textit{inter alia}, the above-mentioned speech by Mr Anastasiades to the House of Representatives.
applying the full gamut of new reporting and accounting rules, which is likely to lead to a change in risk-weighted assets and, potentially, required levels of capital. Even banks already in the Eurozone find it difficult to anticipate capital requirements as a result of changes to regulations. Here it is worth noting that, if there are any capital requirements, they will be small in absolute terms. The TCC banking system had total assets of only €5.5bn in March 2019, meaning that the system is 10 times smaller than the GCC, which had assets of €58.4 billion in the same period. Nevertheless, to ensure that there are no unexpected challenges when Turkish Cypriot banks do join the Eurosystem, an external, independent financial sector stability assessment should be conducted.

5.3 Addressing winners and losers

The key winners

As outlined in Chapter 4, we expect the peace dividend in the first 20 years to raise average per-capita incomes by between €6,800 and €11,000 in constant-price terms. A solution to the Cyprus problem will also enable inhabitants of the TCC to enjoy not just higher living standards but a higher quality social provision, which is not very easy to quantify. While these increases are significant, they are averages. The impact on specific sectors and social groups will be different and will depend to a large extent on their ability to adapt and on the policies that will help them adapt. The clear winners in both communities are expected to be hotels, tour operators, construction companies, shipping companies, lawyers and accountants, and gas companies. Banks in the GCC should also benefit from an expansion of business for the highly indebted construction companies, while petrol stations close to crossing points in the GCC should see business return as the TCC adopts the euro and petrol prices converge. GCC companies involved in services training and meeting EU health and safety standards (see below) should also stand to benefit. Retailers will see a larger market overall, as this is the sector that will see the largest peace dividend. On the other hand, as many operate on thin margins, their ability to thrive will depend on issues such as quality, price, location, marketing and brand recognition.

Common concerns expressed by each community

Below we outline groups that we believe could be the most vulnerable. First, however, in addressing the question of “winners and losers” of a solution, it is important to understand the hopes and fears of the general population as well as those of the business community. As part of our preparations for producing this research, PRIO commissioned two companies\textsuperscript{50} to conduct focus groups and in-depth interviews across all districts and in each community. In total, there were 24 in-depth focus groups with the general population (12 in each community);

\textsuperscript{50} Sia Research & Consultancy in the GCC and Prologue Consulting in the TCC.
4 in-depth groups with small businesses (2 in each community); and 24 in-depth personal interviews with high-profile business people (12 in each community). Fieldwork was conducted between 21 October and 13 November 2019. The objective of this exercise was to examine GCC and TCC attitudes regarding the economic impact of a solution of the Cyprus problem and reunification of the island. Specifically, the focus groups and interviews sought to identify and understand the worries, fears, expectations, needs and expected benefits as regards the economic impact of a solution.

GCC main concerns
Respondents in the GCC generally saw the opportunities of a settlement, especially the following: tourism via an increase in connectivity; construction, especially in Famagusta; shipping as ports open up in Cyprus and in Turkey; and natural gas as obstacles fell away. However, they emphasised that this positive view was conditional on a security settlement that did not leave people or investors feeling unsafe. They also saw benefits to consumers from a larger market and new opportunities for the young. However, they were concerned that the bulk of the cost of a solution might fall on taxpayers in the GCC. They worried about the impact of competition from Turkey, especially if Turkish companies are not bound by the same rules as other companies (a possible allusion to transition periods for companies in the TCC), and the impact of greater competition on agriculture. (Here it should be noted that the EU-Turkey customs union does not extend to agricultural products.) They were also concerned about the size of the public sector in a federal set-up. Many expected property prices to fall in the short term in Limassol and Paphos, though some saw this as having a positive impact on rents and therefore the cost of living, especially in Limassol. The more sceptical believed that only corrupt politicians would benefit.

TCC main concerns
Respondents in the TCC primarily saw opportunities for: price stability and easier and cheaper access to credit via the introduction of the euro; tourism and agriculture via the recognition of airports and a larger EU market; and property via the overall settlement. They, too, saw opportunities for the young, especially those who have emigrated, and saw reduced dependence on Turkey as positive. They also expected the recognition of ports and airports to lead to a decline in production costs. The general public worried about the impact on small businesses of competition from the GCC and said that transition periods were needed. Larger businesses were interestingly less worried about competition as such, but said that external support was needed to upgrade technology. Both the general public and small businesses in the TCC worried about the impact of language barriers on those who speak neither Greek nor English. While they expected the application of the EU’s *acquis communautaire* (body of EU law) would lead to higher standards for healthcare, governance and lower corruption, they also worried that the public sector would not be ready without good preparation.
How can we maximise the peace dividend?

Addressing fears in the GCC and TCC

If we assume that a solution will only pass a referendum if the security settlement is acceptable to both communities, then one can summarise the key fears of the those living in GCC as: the risks of a high taxpayer burden, unfair competition and questions about good governance, either via the size of the public sector or the behaviour of politicians. The key fears of those living in the TCC can be summarised as the impact of competition from the GCC, lack of technology and general “EU-readiness,” language barriers and the quality of the public sector.

Contain the cost of a property settlement. The main risk of a high tax burden comes via the property settlement, as that is where the highest costs will be if the burden falls on taxpayers. We outline in detail in Chapter 6 how property costs could be contained to an affordable range.

Commit to no increase in the public sector. As regards the size of the public sector, we recommend a commitment prior to a settlement not to increase the number of employees currently in the public sector who will work for the future federal and constituent states. Indeed, we understand that this has already been agreed. Given that no public-sector worker (or banking-sector employee) involuntarily lost their job after the crisis in the GCC in 2013, we think it extremely unlikely that any political leader will commit to cutting the size of the public sector in advance of a settlement even if it might be fiscally advisable to do so. Dialogue with the unions to contain the payroll is therefore a more modest and realistic goal.

Free language lessons. As regards the language barrier, ideally both communities would already have introduced mandatory language lessons in school to teach the other community’s language. However, on the assumption that neither community will do this ahead of a settlement, we believe that EU funds could play a strong part via free language lessons across the island, and at times of the day that are appropriate for all socioeconomic groups, especially women in rural communities (see section 5.4 below).

Technically based transition periods. As regards the concerns in the GCC about unfair competition, combined with the fear in the TCC about not being ready for competition, we recommend a technical approach to transition periods (see section 5.2 in this chapter), focusing on upgrading technical capacity, as well as a strong Competition Commission (see below).

Strong preventive institutions. For other ways to ensure good governance and fair competition, we draw on the list of recommendations from the Centre for Sustainable Peace and Democratic Development (SeeD).

SeeD argues for a range of institutions to act as a preventive mechanism and to ensure “a virtuous cycle of endogenous resilience rather than a vicious cycle of conflict.”

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Delivering the Cyprus peace dividend

and violence.” SeeD recommends 12 institutions in total that also bolster internal and external security, as well as institutions. We highlight the following institutions that are more closely related to good governance.

- Federal Commission on Human Rights & Gender Equality to ensure human rights are enjoyed by all. As noted in section 5.4 below, gender equality will also help boost company profits and the economic peace dividend.
- A Federal Public Administration Commission focused on promoting effectiveness, transparency and modernisation of public institutions at all levels.
- Ministry of Reconstruction and Social Cohesion working on various programmes including encouraging and supporting co-operation between professional associations of different communities.
- We would add another institution that is important from the economic perspective: a Competition Commission with a strong mandate and effective powers to ensure fair competition.

To ensure that these institutions are independent and able to make recommendations and evaluations free from external, government or political influence, they should form part of an official monitoring system, perhaps overseen by the UN. It is also important to ensure that they do not lead to a bloated public sector.

Addressing the “losers”

In addition to addressing the fears of the public and businesses, we also need to recognise that some companies and individuals will find it more difficult than others to adjust. The following is a non-exhaustive list of those we believe would be most vulnerable, as well as suggested policies to counteract any negative effects on these subgroups.

Incentivise joint ventures for micro enterprises. Large companies and suppliers that have enjoyed a de facto monopoly or near monopoly in their home market, perhaps because of strong political ties, will find it more difficult to set prices regardless of demand. They will now need to compete with others. From the consumer’s point of view, however, this should lead to lower prices and/or higher quality products and services. While we do not believe that it is appropriate to incentivise joint ventures among large companies, we would encourage research into how one might incentivise micro enterprises (with fewer than 10 employees) to cooperate. To avoid unfair competition, these incentives should probably not be tax based but could relate, for example, to faster licensing or access to specific training that supports inter-communal business cooperation.

Support for firms and professionals in heavily regulated sectors. Banks, accountants, lawyers, and dairy and meat producers in the TCC will face a sharp increase in regulatory requirements as they adopt EU standards. Preparation in advance of a settlement will be
important. While there may be transition periods for some sectors, it is important to understand that food hygiene, as a top priority for the EU, is one area in which there is unlikely to be flexibility. Earmarked, well-designed incentives, for example, to encourage GCC companies to share their experience with TCC companies, combined with EU financial and technical support, will also help companies that operate in heavily regulated sectors to meet new requirements. In addition, incentivised joint ventures will also help GCC firms join forces with TCC firms to tap into the very large Turkish market. As regards professionals and the recognition of qualifications, policies will need to be in place in advance of a settlement to ensure that either their qualifications are “grandfathered” into the new state of affairs, or that professionals receive support to meet new requirements.

**Social assistance targeting for the least skilled.** Targeted social assistance for those who are unable to adapt despite policy interventions will also be important. The GCC introduced targeted social assistance programmes during its bailout programme, and this is already having an impact. The European Commission’s 2019 *Country Report on Cyprus*\(^{52}\) (GCC) noted that “[t]he guaranteed minimum income scheme appears to be having a significant positive impact on poverty and inequality,” although there was still room for improvement. Based on media reports of the federal government competences, social security is likely to be a constituent-state competence; therefore targeted social assistance should be rolled out in the TCC as well.

**Retraining for military personnel.** Discussions surrounding a solution of the Cyprus problem often include a proposal for the full demilitarisation of domestic military forces, although details on security have yet to be fleshed out. However, the recent history of disaffected former soldiers elsewhere in this region suggest that good provisions need to be made for retraining former military personnel, to ensure that they have a stake in the new state of affairs and do not constitute a security threat in future.

**Sector-specific information.** Last but not least, the best way for companies or workers to be able to adapt is if they have good information. While the negotiators focused in the latter part of the 2008-2017 negotiations “core core” political issues (having previously focused on “core issues” that included the economy), companies were largely left in the dark about what the operating environment would look like after a settlement. For example, it is critical that importers, wholesalers, retailers and franchisees know what the status of their licences will be on the first day after a solution so that they can make the necessary preparations. Effective information campaigns will help companies to prepare during the transition periods.

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5.4 Closing the gender gap

A growing body of research demonstrates that one of the most important ways of maximising the peace dividend is by ensuring gender equality. Gender equality (and cultural diversity) have been shown to produce higher economic growth, less volatility and better profitability for companies. We examine some of this research below. In the interests of brevity, we have focused on research that is both recent (past five years) and based on large data sets that cover multiple countries.

Cyprus lags far behind

While there have been improvements relative to previous years, Cyprus still lags behind in gender equality. Cyprus (GCC only) ranks in the bottom quartile for gender equality according to the European Institute for Gender Equality, at 22 out of 28 countries (EIGE 2019). The main issues holding the GCC back are access to power (political, economic and social) and time (care activities and social activities). Lack of time also affects access to power. If women are taking most of the responsibility for household labour and the care of children or the elderly, their responsibilities will prevent them from engaging in civic or political activities. This, in turn, means that the specific needs of women in policy-making can be easily ignored. Available evidence suggests that the issues of gender equality are similar, or potentially worse, in the TCC. As noted in Chapter 2, female labour force participation for over-15s is only 40.3% in the TCC, compared with 57.4% in the GCC. This suggests that there are large barriers to entering or staying in the labour market.

Statistics on the gender pay-gap also point to the lack of opportunities for women in management, which also affects profits (see below). In the GCC, while Eurostat data report that women earned 13.7% less than men in 2017, compared with an EU average of 16%, the gender pay-gap was 22% when the public sector was excluded. Moreover, in the sector of professional, scientific and technical activities, which is dominated by lawyers and accountants, the gap was the highest in the EU, at 32.8%. While there are few recent statistics on pay gaps in the TCC, a 2001 paper found that only 2% of Turkish Cypriot women held managerial positions in the private sector, and that there was a large gender pay gap, with only 10% of women in the highest bracket for earnings.

While male-female data on specific sectors are lacking, one can observe that there is also a pay gap between professions: women are concentrated in low-paid professions and at the lower echelons of the workplace hierarchy. This also reinforces gender stereotypes, preventing women from exploring fields that are not within the scope of traditional expectations.

53 European Institute for Gender Equality (EIGE), Gender Equality Index, 2019 https://eige.europa.eu/gender-equality-index/2019/CY.
How can we maximise the peace dividend?

Both equality and diversity are good for business

Common sense suggests that a homogenous group of people in decision-making positions will be prone to “groupthink” – which leads to costly mistakes. There is now solid research to demonstrate that both gender equality and diversity are good for business, regardless of geography. Research based on 2017 data of more than 1,000 companies, 7 sectors and 12 countries, undertaken by the global consultancy, McKinsey & Company,\(^\text{56}\) found that companies with greater gender diversity enjoyed better performance. Specifically, when performance was measured as the “EBIT margin”,\(^\text{57}\) companies in the top quartile for gender diversity were 21% more likely to outperform their sector peers than those in the bottom quartile. When long-term value creation was measured via an economic profit margin,\(^\text{58}\) the most gender-equal companies were 27% more likely to outperform their peers.

“We found that having gender diversity on executive teams, specifically, to be consistently positively correlated with higher profitability across geographies in our data set.”

McKinsey & Co. 2018

In the context of Cyprus, it is also interesting to note that ethnic diversity had an even bigger positive impact on results. The best companies for ethnic diversity were 33% more likely to outperform the worst for the EBIT margin.

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\(^{57}\) The ratio of earnings before interest and taxes to net revenue.

\(^{58}\) Net Operating Profit Less Adjusted Taxes – (Invested Capital x Weighted Average Cost of Capital).
A woman as top manager is not enough

A separate study by the Peterson Institute, covering 21,980 firms in 91 countries, assessed the impact on profitability (gross and net profit margins) of women in corporate leadership positions. While the results did not show a statistically significant impact for the top positions (chief executive officer), it did find that women in executive positions (i.e., upper management but non-board positions, also known as C-Suite) had a greater positive impact on corporate performance than the number of women leaders or board members. A typical firm in the sample, with a net profit margin of 6.4%, could expect to see its profit margin rise to 7.4%. These results suggest that focusing on bringing women into the workforce, keeping them there and encouraging their promotion, would have a stronger impact on profits than a “token” presence in the boardroom. The research concluded that the findings underscored the “importance of creating a pipeline of female managers and not simply getting lone women to the top.”

Higher female labour force participation is good for growth

Bringing more women into the labour market is also good for broader economic growth. A global study by IMF staff covering multiple countries found that closing the gender gap for female labour force participation resulted in significant gains. According to the research, raising female labour force participation could increase GDP, that is, overall economic size, by as much as 80%. Moreover, it found that higher female labour force participation can also be good for men. Depending on the level of what the IMF calls the elasticity of substitution (ES) – essentially, how low the starting point is – the IMF staff paper found that increasing female labour force participation can also increase the wages of men, via the positive impact on productivity.

“…we found that companies with the most ethnically/culturally diverse executive teams – not only in terms of absolute representation, but also of the variety or mix of ethnicities – are 33% more likely to outperform their peers on profitability.”

McKinsey & Co 2018

“… the correlation between women at the C-suite level and firm profitability is demonstrated repeatedly, and the magnitude of the estimated effects is not small… a profitable firm at which 30 percent of leaders are women could expect to add more than 1 percentage point to its net margin compared with an otherwise similar firm with no female leaders.”

Peterson Institute 2016


“…closing the gender gap in LFP [labor force participation] could increase GDP by between 10 percent and 80 percent, depending on the individual value of the FLFP [female labour force participation rate]. … Our estimates also imply that men stand to gain from higher FLFP.”

IMF Staff Discussion Note, 2018

**Figure 5.3**

GDP gains from closing the gender gap in female labour force participation

![Graph showing GDP gains from closing the gender gap](image)

**Source:** IMF Staff Discussion Note, Economic Gains From Gender Inclusion.

Based on this analysis, closing the gender gap in participation rates would give a particular boost to growth in the TCC, where the female labour force participation rate for 15+ year-olds is only 40%. Inferring from the IMF staff paper’s graphical presentation, one might conclude that, if the TCC closed the gender gap, it could grow in size by up to 30%. A 30% increase in economic size for the TCC would increase all-island GDP by around 4.4 percentage points.

Separately, the European Institute for Gender Equality (EIGE)\(^{61}\) estimated that closing the “gender gap”\(^{62}\) for female labour force activity in the labour force could increase average EU incomes (GDP per capita) by 1.5%-2.2% by 2030 and a rather larger 6.1%-9.1% by 2050. The lower the starting point, the higher the gain. Exact estimates for the impact on GDP or GDP per capita by country are not given. However, a graphical presentation of countries\(^{63}\) suggests that

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\(^{62}\) Reducing gender inequalities in STEM (science, technology, engineering and mathematics) education, labour market activity and wages.

\(^{63}\) EIGE, *Report on the empirical application of the model*, Figure 5.12 Impact on GDP in 2050.
overall GDP in the GCC (Group 3) could be up to 7% higher if all gaps relating to education, labour force activity, the total fertility rate and wages were addressed. One can assume that the gain for the TCC would be rather higher, given the lower starting point. The economy with both the closest GDP per capita and the closest male-female gap in activity rates to the TCC is Romania.\(^{64}\) Romania belongs in Group 2, where EIGE found that the potential increase if all gaps were addressed could be around 15%.

**Female political participation is good for sustainable peace**

Enhancing the peace dividend by creating the right conditions for investment means ensuring that peace is sustainable. Involving women has also been demonstrated to be good for the sustainability of peace settlements. In the UN Secretary-General’s report to the Security Council Resolution of June 2018 (S/2018/610), the Secretary-General noted evidence confirming that the “meaningful participation of women deepens peacebuilding efforts measurably and leads to more sustainable peace.” While Cypriot women are present at the negotiating table, they are not the key decision-makers, at least in public. Certainly we are far from the UN Secretary-General’s call for the “full and effective participation” of women “at all stages of the peace process.”\(^{65}\) Research published in 2018\(^{66}\) analysing the 216 peace agreements between 1975 and 2011 (including Northern Ireland), found that women’s meaningful participation “leads to better accord content, higher agreement implementation rates, and longer lasting peace.” Insofar as peace generates political stability, which in turn generates investor confidence and more investment, involving women in the design of the Cyprus settlement should also increase the economic peace dividend.

> “Despite the small number of peace agreements signed by women to date, our results clearly demonstrate that peace processes are more likely to lead to durable peace if women have been able to shape them.”
> 
> Krause et al., 2018

**The need for measurement**

One obvious policy area is regular measurement and publication of gender gaps. For example, male-female data on earnings by sector, on the proportion of female executives in firms or on boards, on the cost of childcare and so on, are either not published at all or are not produced with enough frequency to influence policy-making. SeeD notes the importance of such measures in its report on the Women Peace and Security Agenda for Cyprus.\(^{67}\)

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\(^{64}\) EU nominal GDP per capita derived from Eurostat; gap in activity rates from EIGE.


How can we maximise the peace dividend?

Suggested policy interventions
A full analysis of the tried and tested policies that can close the gender gap is beyond the scope of this report. The Centre for Sustainable Peace and Democratic Development (SeeD), however, has produced substantial research on the topic under its Social Cohesion and Reconciliation (SCORE) Index programme. SeeD also produced specific recommendations for both the GCC and TCC. Our analysis above suggests that policies to raise the numbers of women in work would go a long way towards addressing the differential impact on men and women of a settlement of the Cyprus problem. Even without a settlement of the Cyprus problem, addressing women’s access both to work, and to managerial positions once they are in work, would have a positive impact in both communities.

A key policy intervention would be a full-scale assessment to identify barriers to women entering or remaining in the workforce, followed by policies to address those barriers. One can expect them to include the following:

■ Level the playing field
- Enforce post-settlement legislation on discrimination in recruitment, promotion and pay.
- Set targets or quotas in the public and private sectors and ensure gender- and ethnically balanced company boards.
- Combine these measures with a public communications campaign to promote the benefits of gender equality outlined in this report to both companies and the wider economy.

■ Family-friendly policies
- Ramp up initiatives to support women in work, such as affordable childcare and free, quality after-school care.
- Support flexible working times and incentives for job-sharing, so that companies are not penalised via social insurance for employing two part-time people.
- Provide parental leave policies that allow both men and women to take leave.

■ Invest in transport options to reduce barriers to labour market participation
- Invest in cost-effective, safe and reliable public transport within and between towns. This is particularly important for households with one car or no car and in single-parent

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68 The full range of research, reports, presentations and recommendations can be found here: https://www.scoreforpeace.org/publications/?country_id=1&type_id=&lang=en&submit=Filter.
households, which in the majority of cases are headed by the mother. This is also important for a culture in which parents or family members spend a great deal of time taking children to and from school and/or private lessons.

**Support skills development**
- Offer basic support for CV preparation, interview skills and public speaking, especially for younger women.
- Provide training for women in work skills that are a good fit for flexible working (such as technology skills and languages).
- Address gender stereotyping in education to broaden employment opportunities for girls and boys.

**Gender assessments in policy design**
- More generally, run a “gender check” on all government policies, combined with gender-sensitive budgeting, to ensure that they do not unconsciously privilege men over women.

These kinds of policies are not contentious and indeed would be in line with best practice across higher-income countries (see Figure 5.4).

**Figure 5.4**

<table>
<thead>
<tr>
<th>IMF: Key Gender-Related Fiscal Policies Implemented by G7 Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Tax Policies</strong></td>
</tr>
<tr>
<td>Individual income tax</td>
</tr>
<tr>
<td>Tax relief for single or working parents</td>
</tr>
<tr>
<td>Targeted in-work tax credits or benefits</td>
</tr>
<tr>
<td><strong>2. Expenditure policies</strong></td>
</tr>
<tr>
<td>Gender-responsive public employment</td>
</tr>
<tr>
<td>Quotas in managerial positions</td>
</tr>
<tr>
<td>Public sector equal pay</td>
</tr>
<tr>
<td>Work-life balance</td>
</tr>
<tr>
<td>Women in low-income support</td>
</tr>
<tr>
<td>Education, STEM, elimination of stereotypes</td>
</tr>
<tr>
<td>Health prevention and age-related issues</td>
</tr>
<tr>
<td>Child care support</td>
</tr>
<tr>
<td>Paid parental leave</td>
</tr>
<tr>
<td>Gender-related social security reforms</td>
</tr>
<tr>
<td>Pensions linked to the number of children</td>
</tr>
<tr>
<td>Programs to counter domestic violence</td>
</tr>
<tr>
<td>Gender-sensitive foreign aid and cooperation</td>
</tr>
</tbody>
</table>

*Source: IMF citing OECD.*
CHAPTER 6:

ENSURING VIVABLE PROPERTY FINANCE

6.1 Establishing the key principles

The cost of the property settlement is subject to a large number of variables that have yet to be made public. To ensure that it is economically viable, and that public concerns about a property settlement are addressed, it is essential that in-depth studies are conducted with the input of both communities and the support of international experts. These findings should be made public and discussed in public forums so that citizens are well informed. Below is our attempt to initiate such a process.

Ensuring that the property settlement is both politically and economically viable involves finding the “golden mean” within the following three principles. All three principles will affect the financial viability of the property settlement, broader economic stability, and therefore ultimately the political sustainability of a united Cyprus.

■ **Legal.** If the legal aspects of a property settlement are poorly designed, a great many cases will end up in local and international courts. This will create distortions in the property market and will hold back economic growth.

■ **Fair.** The property settlement needs to be seen to be fair by those affected. This will support the political stability of a united Cyprus, which in turn will support conditions for investment and economic growth.

■ **Affordable.** A property settlement that places too much of a burden on the federal/constituent states, or which creates distortions by bringing large amounts of cash into a small economy, will be a failure. The engagement of international financial institutions,71 as occurred during the latter stages of the negotiations that ended in 2017 to address this question, is welcome. But more needs to be done to inform and engage the public.

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6.2 Engaging the public

Until very recently, there has been a tendency in the negotiations to put off addressing the critical question of property financing until the last moment. Even when it is addressed, it tends to happen behind closed doors. The authors believe that this is a mistake. Involving the public is important for both political and economic reasons. If citizens do not know how a solution will be financed, are not convinced that experts are working on how to finance it and/or that it constitutes the best possible deal for both communities, they will not vote in favour of a settlement. In addition, lack of knowledge about how a property settlement might be financed can also distort the economy more generally.

We therefore recommend that the negotiators openly commit to the above-mentioned three principles and declare that they are working diligently with international institutions to find the “golden mean” that respects all three principles. Since the various options involve trade-offs, we also recommend that they engage citizens when they are working through the pros and cons of various options, perhaps through Citizens’ Assemblies – a process of “deliberative democracy” that has been used several times in the Republic of Ireland and Northern Ireland.72 Engaging citizens will also meet the UN Security Council’s call for the “full and effective participation of civil society and women in particular at all stages of the peace process.”73

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72 For a description of how they work, see Citizens’ Assembly for Northern Ireland https://citizensassemblyni.org/faq/.
6.3 Ensuring affordability

In the negotiations to date, it has been agreed in principle that the property settlement will involve a mix of three principal remedies: reinstatement, exchange for affected property in the other constituent state, and compensation.\(^{74}\) The financial viability of the property settlement will therefore depend on a number of variables.

- *How much property* is compensated.
- *How compensated property is valued*.
- *How fast* compensation is paid.
- *What form* compensation takes (cash, bonds, etc.).
- *Who pays* the compensation.
- *Any new housing needs* created by reinstatement, especially in territorial adjustment areas.

Size of affected property

Both sides in the negotiations have been reluctant to make public the size of what is termed “affected property.” The best publicly available statistics are from the Republic of Cyprus Planning Bureau and date from 1964 (see Figure 6.2). Sales between the two communities were not permitted between 1963 and 1974, and we understand that the table below probably broadly represents the situation in 1974, although the area of land belonging to the Evkaf could be underestimated. On this basis, we assume that there are 1.4 million donums (188,020 hectares) of private, Greek Cypriot, affected property in the north and 401,000 donums (53,720 hectares) of private, Turkish Cypriot, affected property in the south.

**Figure 6.2**

<table>
<thead>
<tr>
<th>Property ownership estimates: starting position (000 donums)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Situation in 1964 (a)</strong></td>
</tr>
<tr>
<td>---------------------------</td>
</tr>
<tr>
<td>Greek Cypriot</td>
</tr>
<tr>
<td>Turkish Cypriot</td>
</tr>
<tr>
<td>Foreign</td>
</tr>
<tr>
<td>State</td>
</tr>
<tr>
<td>Church</td>
</tr>
<tr>
<td>Evkaf</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

\(^a\) Intercommunal sales were banned in 1963-74. The amount of Evkaf land is disputed.

*Note:* One Cypriot donum is 1,338 square metres.

*Source:* Original data from Republic of Cyprus Planning Bureau.

Delivering the Cyprus peace dividend

Possible size of affected property after territorial adjustment
If we assume that territorial adjustment reinstates roughly the same area as under the 2004 Annan Plan, Greek Cypriot affected property in the Turkish Cypriot constituent state drops by 25% to 1.0 million donums, while affected Turkish Cypriot property in the Greek Cypriot constituent state rises by 22% to 489,000 donums (see Figure 6.3).

Figure 6.3

<table>
<thead>
<tr>
<th>Property ownership estimates: after territorial adjustment ('000 donums)</th>
<th>South of buffer zone</th>
<th>Buffer zone</th>
<th>North of buffer zone</th>
<th>Subtotal ex SBA</th>
<th>SBAs</th>
<th>Total inc SBA</th>
</tr>
</thead>
<tbody>
<tr>
<td>After territorial adjustment as per Annan Plan V</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Greek Cypriot</td>
<td>2,939</td>
<td>0</td>
<td>1,043</td>
<td>3,982</td>
<td>89</td>
<td>4,071</td>
</tr>
<tr>
<td>Turkish Cypriot</td>
<td>489</td>
<td>0</td>
<td>329</td>
<td>818</td>
<td>15</td>
<td>833</td>
</tr>
<tr>
<td>Foreign</td>
<td>14</td>
<td>0</td>
<td>5</td>
<td>19</td>
<td>13</td>
<td>32</td>
</tr>
<tr>
<td>State</td>
<td>1,268</td>
<td>0</td>
<td>489</td>
<td>1,757</td>
<td>64</td>
<td>1,821</td>
</tr>
<tr>
<td>Church</td>
<td>101</td>
<td>0</td>
<td>35</td>
<td>136</td>
<td>6</td>
<td>142</td>
</tr>
<tr>
<td>Evkaf</td>
<td>12</td>
<td>0</td>
<td>2</td>
<td>14</td>
<td>1</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td>4,823</td>
<td>0</td>
<td>1,903</td>
<td>6,726</td>
<td>188</td>
<td>6,914</td>
</tr>
</tbody>
</table>

Note: One Cypriot donum is 1,338 square metres.

Reducing the area to be compensated
The most commonly proposed way of reducing the area that needs to be compensated is through exchange. Dispossessed owners would be encouraged and perhaps incentivised to swap their property in the future constituent state with property in the other constituent state. This would probably be done via a neutral third party such as the proposed Property Commission. If all Turkish Cypriot dispossessed owners went down this route, the amount of affected Greek Cypriot property in the Turkish Cypriot constituent state would drop to 554,000 donums. If one-third of the remaining property is reinstated, then the area to be compensated falls to 369,000 donums (49,372 hectares).

This could be cut even further if, as part of the exchange programme, Greek Cypriot dispossessed owners are encouraged to take a mixture of land and other incentives. These incentives could be land consolidation,75 government-funded infrastructure such as irrigation or electricity, tax breaks, increases in building coefficients, or other benefits. In Figure 6.4 we have set out a scenario in which 1 donum of property in the north is exchanged for 1 donum of property in the south, and one in which 1 donum in the north is exchanged for 0.8 donums

75 A practice in the Republic of Cyprus law, whereby the government swaps unparcelled agricultural land in exchange for less parcelled land.
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in the south plus other incentives. Applying such a mechanism would reduce the amount of affected Greek Cypriot property to 456,000. If, after this stage, half of the remaining property is reinstated, then the area to be compensated falls to 228,000 donums (30,506 hectares).

**Figure 6.4**

<table>
<thead>
<tr>
<th>Scenarios for size of property to be compensated</th>
<th>GC</th>
<th>TC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before territorial adjustment</td>
<td>1,405</td>
<td>401</td>
</tr>
<tr>
<td>After territorial adjustment</td>
<td>1,043</td>
<td>489</td>
</tr>
<tr>
<td>After 100% exchange at 1:1 donums</td>
<td>554</td>
<td>0</td>
</tr>
<tr>
<td>After reinstatement of one-third of the remainder</td>
<td>369</td>
<td>0</td>
</tr>
<tr>
<td>Memorandum items: alternatives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>After 100% exchange at 1:0.8 donums</td>
<td>456</td>
<td>0</td>
</tr>
<tr>
<td>After reinstatement of one-half of the remainder</td>
<td>228</td>
<td>0</td>
</tr>
</tbody>
</table>

*Source: Authors’ calculations.*

After territorial adjustment and exchange, we now reach a situation in which between 228,000 and 369,000 donums need to be compensated. How much compensation will cost will depend on how the property is valued. The value of affected property, and to what extent, if any, compensation for loss of use should be offset against benefits accrued over the decades to dispossessed owners, is a highly contentious issue and estimates vary widely.

We caution against using the methodology of the Annan Plan for several reasons. First, it was contentious, as demonstrated by the fact that the methodology for valuation was altered four times during the various versions of the Annan Plan. It was based on values in 1963 and 1974, adjusted for property-price inflation in the meantime, but also stipulated that the calculation should be “based on comparable locations where property prices were not positively or negatively affected by those events” (the events between 1963 and 1974). Whether there is any property on the island whose prices have not been affected by these events is questionable. Court cases at the European Court of Human Rights (ECHR) strongly suggest that using the Annan Plan methodology would have involved highly speculative estimates about how prices in different areas were affected by conflict. Its speculative nature would therefore have made it vulnerable to litigation. This is also why we have not included

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77 In Demades (Application no. 16219/90, Just Satisfaction, 22 April 2008, para 23) and other cases, the European Court of Human Rights (ECHR) has rejected “speculative” valuations, for example based on possible future uses of the property: https://www.bailii.org/eu/cases/ECHR/2008/331.html.
loss of use in our calculations, since the ECHR also found many of these to be speculative. Second, since official statistics on property prices were not published until a few years ago, estimates of historical property prices were based during the Annan Plan largely on estimates for average property-price inflation rates since 1963 or 1974 that have been contested. Last but not least, decisions on which property-price inflation rate to choose would easily become politicised, which in turn would make a huge difference to the final bill. To give an illustration, if the political leaders settled on an average property price inflation rate of 8% in the period 1974-2019, the cost of compensation would be 2.3 times higher than if they chose 6%. Depending on other variables, this could raise the compensation bill by tens of billions of euros. Another pitfall to avoid if the compensation system is to be viable, is to set realistic values for the property to be compensated. The financial crisis in the GCC, which peaked in 2013, has underlined that property owners, and indeed banks, typically believe that property is worth far more than its real market value. Case law also suggests that property owners make claims that are several multiples of the amount actually awarded in court. For example, we analysed in detail 20 cases at the ECHR involving 282 individual plots and 169 hectares (1,263 donums). The total pecuniary damages claimed for loss of use of these plots (most of which were built property) amounted to €232 million, yet the court awarded only €35.8 million, or just 15% of the total claimed. Compensation was mainly for developed property, and averaged €21 per square metre.

6.4 Three scenarios for the cost

Below we have set out three scenarios for the cost of compensation based on different methodologies. The first, which is the highest, is drawn from estimates made by the University of Cyprus in 2000 and updated in 2011 for the value of property in 2009-11. Prices in the GCC have since fallen by at least 25%. Therefore the UCY estimate, updated for the drop in prices in the meantime, implies a value per square metre in 2018 of €26.5. The second is drawn

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79 We analysed just satisfaction judgments in the following 20 ECHR cases (application numbers in brackets): Andreou Papi (16094/90); Christodouliou (16085/90); Diogenes And Tseriotis (16259/90); Epiphaniou (19900/92); Hadjiprocopiou (37395/97); Hadjithomas (39970/98); Hapeshi & Hapeshi-Michaelidou (35214/97); Iordanis Iordanou (43685/98); Josephides (21887/93); Olympiou (16091/90); Ramon (29092/95); Rock Ruby hotels (46159/99); Saveriades (16160/90); Skryopilia Yialias Ltd (47884/99); Strati (16082/90); Vrahimi (16078/90); Zavou (16554/90); Loizou (16682/90); Lordos (15973/90).

80 The analysis excludes Applicant Number 9 in the Lordos case (16682/90), as it was for an area that was five times larger than all the others combined and would have significantly depressed the calculated figure for average compensation per square metre.

81 Pashardes, «Το κόστος της Τουρκικής εισβολής και προτάσεις ισοτιμής κατανομής του» (“The Cost of the Turkish Invasion and the Equal Distribution of Burdens”), 2000 and later updates.

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from ECHR awards in the above-mentioned cases, where we calculate that loss of use was awarded at an average of €21.2 per square metre. The third methodology is drawn from the average compensation paid to date by the Immovable Property Commission (IPC) in the TCC. Here, the average compensation accepted by applicants up to August 2019 has been €15/square metre.\(^{83}\) It should be noted that, while the IPC payouts have been the lowest, around 80% of the IPC cases are for undeveloped land, whereas the ECHR cases were mainly for developed property.\(^{84}\) Land distribution statistics suggest that, even today, at least 90% of land in the TCC is non-residential.\(^{85}\) It is also worth noting that the ECHR endorsed the IPC valuation methodology as a “fair basis” in the Loizou\(^{86}\) case.

Under these three above-mentioned valuations, the cost of compensation ranges from €4.6bn to €8.1bn if the amount to be compensated is 228,000 donums, or from €7.4bn to €13.1bn if the amount to be compensated is 369,000 donums. This range of €4.5bn to €13bn for property compensation is compatible with unconfirmed reports that the World Bank had estimated the cost net of exchange at €8bn.\(^{87}\)

**Figure 6.5**

<table>
<thead>
<tr>
<th>Scenarios for cost of compensation</th>
<th>Low (a)</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area remaining after exchange, territorial adjustment &amp; reinstatement</td>
<td>228,000</td>
<td>369,000</td>
</tr>
<tr>
<td>Area in donums to be compensated</td>
<td>228,000</td>
<td>369,000</td>
</tr>
<tr>
<td>Cost of compensation in millions of euro</td>
<td>Low (a)</td>
<td>High</td>
</tr>
<tr>
<td>Using average payout in IPC awards (€15/sq m): mainly land</td>
<td>€4,569</td>
<td>€7,395</td>
</tr>
<tr>
<td>Using average compensation in 20 ECHR cases (€21.2/sq m): mainly built property</td>
<td>€6,467</td>
<td>€10,466</td>
</tr>
<tr>
<td>Using UCY 2009-11 estimates, updated to 2018 prices (€26.5/sq m)</td>
<td>€8,079</td>
<td>€13,076</td>
</tr>
</tbody>
</table>

(a) Whereby 1 donum in the north is exchanged for 0.8 donums in the south plus other incentives. Source: Sapienta Economics and authors’ calculations.

**6.5 Can the property settlement be financed?**

Can a united Cyprus afford property compensation if it has to be financed from domestic sources? The short answer is yes, if handled sensibly. For the purposes of this analysis we assume that there will be no aid from the international community for compensation, given that Cyprus counts as a high-income country, and that any funds from Turkey for supporting a settlement may well be directed to rehousing families who might be displaced as a result of

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\(^{83}\) Compensation is defined in UK sterling. The average award to date has been £13.18 per square metre.

\(^{84}\) Our calculation that 80% of IPC claims relate to undeveloped land is based on a detailed analysis of cases up to 2014.


\(^{86}\) Loizou and others v. Turkey (Just Satisfaction), App. No. 16682/90 (2011).

reinstatement and territorial adjustment.\textsuperscript{88} We therefore assume in this analysis that compensation will initially come from either the constituent state or federal government budgets. Options for raising funds over the medium term from other sources are discussed below.

As outlined in Chapter 4, our scenarios for post-settlement real GDP growth, based on two different methodologies, yield a cumulative peace dividend that ranges from around €11.0bn to €17.4 billion at constant prices. If we assume that government revenue remains fairly stable at around 38% of GDP, the government revenue “dividend” – that is, additional tax and other revenue as a result of a solution – should be between €4.2bn and €6.7bn at constant prices. In our baseline scenario, 61% of property compensation could be funded simply by the increase in the tax-take and other revenues that would come with a growing economy. In the worst-case scenario, if growth is low and negotiators go for the highest compensation scenario, then government revenue will cover only 32% of the compensation bill. In the best-case scenario (high growth, low compensation), additional revenues could cover the entire bill.

Taking the lowest compensation scenario of €4.6bn, it is worth noting that the Republic of Cyprus government spent €3.5bn in a single year in 2018 on liquidating the Cyprus Cooperative Bank according to IMF data.\textsuperscript{89} Moreover this cost was met without recourse to international assistance. This fact, plus the above-mentioned revenue dividend, suggests that €4.6bn should be affordable, especially if it is spread over a number of years.

\textbf{Figure 6.6}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{chart.png}
\caption{Government revenue from peace dividend v. scenarios for property compensation (EUR billion)}
\end{figure}

Source: Authors’ estimates.

\textsuperscript{88} In our 2014 report, we estimated that this could be as high as €2bn, but this could also be considerably lower depending on rental or leasing arrangements between those who repossess their properties and current users of those properties.

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If the negotiators go to the other extreme and choose a methodology that leads to the highest compensation cost of €13bn (approximately half of all-island GDP today), then they will need to adopt several methods to avoid taking money from essential services such as health and education. They will also need to avoid economic distortions by pouring large amounts of money into a small economy in a short period. Incentives that will help reduce the federal or constituent states‘ compensation bill include the following.

■ **An online, fast-track system.** In exchange for a faster payout, owners can choose to take a discount on the assessed compensation value.

■ ** Longer payment period.** Stretching payments over a 30-year period via long-term bonds issued to owners. These bonds to owners could be financed on international markets. The Republic of Cyprus issued its first ever 30-year international bond in May 2019, paying a coupon (interest rate) of 2.75%.

■ **Ownership stakes.** Offers of ownership stakes in special areas designated for development instead of monetary compensation. This may be especially attractive to owners who want to exchange large tracts of land.

■ **Contributions from current users.** Revenue from current users who gain full clean title to their properties, and who thereby see the value of those properties rise, could be raised via taxation, or via a kind of mortgage that becomes payable to the government when the property is sold.

Ultimately the amount to be compensated and who pays for it will be a political decision, balancing considerations of acceptability, equity (including the impact on other stakeholders of decisions) and affordability. As long as negotiators do not take decisions without calculating the financial consequences, property compensation should be affordable.


SUCH AN ARGUMENT ALSO MAKES SENSE INTUITIVELY. ONE CAN EXPECT TO SEE BROAD GAINS IN PRODUCTIVITY IN A REUNIFIED ECONOMY, ESPECIALLY ONE IN WHICH EFFORTS ARE MADE BOTH BEFORE A SETTLEMENT AND IN ITS EARLY STAGES TO ENSURE THAT INSTITUTIONS WORK WELL. ONE CAN ALSO EXPECT THAT THE UNIFICATION IS GOING TO INCREASE THE CAPITAL INVESTMENT INTO CYPRUS. THIS IS IN LINE WITH PREVIOUS HISTORICAL PERIODS WHEN THE ISLAND EXPERIENCED HIGH CAPITAL EXPENDITURE GROWTH.


A UNITED CYPRUS WOULD ACT AS A POSITIVE “SHOCK” TO ADDRESS THESE SHORTCOMINGS. EVEN UNDER VERY CONSERVATIVE ASSUMPTIONS, AND UNDER TWO DIFFERENT FORECASTING METHODOLOGIES, WE FIND THAT A UNITED CYPRUS SETTLEMENT WOULD GENERATE A SIGNIFICANT BOOST TO TOURISM, CONSTRUCTION, SHIPPING, AND PROFESSIONAL SERVICES, WITH THE BIGGEST PRIZE OF ALL GOING TO WHOLESALE AND RETAIL...
trade. Under our three scenarios of low-baseline-high forecasts, incomes per capita would be, on average, €6,858–€10,893 higher with a solution than without one, and TCC incomes would be 80–90% of GCC incomes, compared with 63.4% without a solution. Real GDP growth would be 1.2 to 1.8 percentage points higher, while the total size of the economy would be €10.9bn–€17.4bn larger.

Figure 7.1

<table>
<thead>
<tr>
<th>Peace dividend summary: all-Cyprus forecast (average of sectoral and TFP forecasts)</th>
<th>With solution</th>
<th>Without solution</th>
<th>Peace dividend (a)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Baseline scenario</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic size: GDP at constant prices by 2040 (EUR million)</td>
<td>54,223</td>
<td>40,259</td>
<td>13,964</td>
</tr>
<tr>
<td>Incomes: GDP per capita at constant prices by 2040 (EUR)</td>
<td>33,874</td>
<td>25,151</td>
<td>8,723</td>
</tr>
<tr>
<td>Growth: average real GDP growth rate 2021-2040 (%)</td>
<td>3.80%</td>
<td>2.30%</td>
<td>1.50%</td>
</tr>
<tr>
<td><strong>Low scenario</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic size: GDP at constant prices by 2040 (EUR million)</td>
<td>51,237</td>
<td>40,259</td>
<td>10,978</td>
</tr>
<tr>
<td>Incomes: GDP per capita at constant prices by 2040 (EUR)</td>
<td>32,009</td>
<td>25,151</td>
<td>6,858</td>
</tr>
<tr>
<td>Growth: average real GDP growth rate 2021-2040 (%)</td>
<td>3.50%</td>
<td>2.30%</td>
<td>1.20%</td>
</tr>
<tr>
<td><strong>High scenario</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic size: GDP at constant prices by 2040 (EUR million)</td>
<td>57,697</td>
<td>40,259</td>
<td>17,438</td>
</tr>
<tr>
<td>Incomes: GDP per capita at constant prices by 2040 (EUR)</td>
<td>36,044</td>
<td>25,151</td>
<td>10,893</td>
</tr>
<tr>
<td>Growth: average real GDP growth rate 2021-2040 (%)</td>
<td>4.10%</td>
<td>2.30%</td>
<td>1.80%</td>
</tr>
<tr>
<td><strong>Relative incomes: TCC GDP per capita as % of GCC by 2040</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TCC GDP per capita as % of GCC</td>
<td>85.0%</td>
<td>63.4%</td>
<td>-</td>
</tr>
</tbody>
</table>

(a) Difference between the outcome with a solution and the outcome without a solution.
Source: Authors’ forecast.

Stronger economic growth would be accompanied by faster job-creation. Given the range of variables that would affect employment growth, our projections for employment are tentative, and we have only attempted a forecast for the first 10 years (from 2021 to 2030). We tentatively expect a solution of the Cyprus problem to create around 100,000 more jobs in the first 10 years than the status quo. Around 30,000 of these new jobs would be created in the tourism sector, 18,000 in wholesale and retail trade, 10,000 in construction and around 6,000 in the airline and shipping sectors.

This kind of growth would create significant additional tax and other government revenues. Even under a scenario in which a united Cyprus needs, at least initially, to fund property compensation from local sources, we find that a united Cyprus can afford property compensation if it is handled sensibly. Under our baseline forecast, 61% of property compensation could be funded simply by the increase in the tax-take and other government revenues that would come with a growing economy. Options to ensure that the remainder can be financed include
Conclusions and recommended next steps

a fast-track system that pays more quickly for those who choose to take a discount on the assessed compensation value; stretching payments over a 30-year period via long-term bonds issued to owners; offers of ownership stakes instead of monetary compensation in special areas designated for development; and contributions from current users who gain full clean titles to their properties and who thereby see the value of those properties rise.

Reaching the higher end of our forecast will depend on the right mix of policies. We identify the following four policy areas.

Institutions. A united Cyprus economy will have a strong head start if citizens are confident that the new federal structure will be durable and robust. This can be done through careful preparation by bi-communal teams beforehand on less sensitive areas, such as the economy – something which will increase confidence that the two communities can successfully cooperate. Such cooperation could be complemented by more coordination in other areas of common interest, such as the environment, antiquities, disease control, renewable energy, crime, agricultural standards, culture, sport and other areas.

Transition periods. A technical approach to transition periods to ensure that they are of a fixed duration, limited in time and scope and are based, with the advice of the EU, on technical grounds, will also ensure that the adaptation and implementation of the *acquis communautaire* (the body of EU law) is achieved in the shortest time possible, without creating any distortions in the economy or significant social problems. Good preparation well in advance of a settlement will also help to prepare for the post-settlement environment and help to more quickly minimise the economic differences and reduce the income inequality between the two communities.

Addressing “winners and losers.” Clearly, while many stand to gain from a settlement, it is also important to recognise that some companies and individual sectors will find it more difficult to adjust. We recommend that the authorities: incentivise joint ventures for micro enterprises, so that they can benefit from each other’s relative competitive advantages; provide support for firms and professionals in heavily regulated sectors, such as food production and the financial sector; offer social assistance for the least skilled and retraining for military personnel; and provide sector-specific information so that companies can prepare. Investment in language education will also reduce barriers to employment, while social assistance targeting should be applied to the most vulnerable.

Closing the gender gap. There is now substantial cross-country research to demonstrate that gender diversity and gender equality are both good for profits and good for economic growth. Indeed, gender-sensitive policies could be one of the quickest ways of maximising the peace dividend. A key policy intervention would be a full-scale assessment to identify barriers to women entering or remaining in the workforce, followed by policies to address those barriers. These policies would focus on levelling the playing field for women and men; introducing family-friendly policies; investing in transport; supporting skills development; and introducing gender assessments into policy design.
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Research centre on Interactive media, Smart systems and Emerging technologies (RISE), http://www.rise.org.cy/en-gb/.


The Cyprus Peace Dividend Revisited of May 2014 was the first attempt to quantify the peace dividend using a sector-by-sector forecast and a forecast for total factor productivity (TFP). This followed the three-part Day After series published by the PRIO Cyprus Centre, which pioneered the concept of a Cyprus peace dividend using different forecasting methodologies.

In this update, the authors argue that the divided economies of Cyprus have reached their limits in terms of potential. Without a solution of the Cyprus problem that unites two small markets, the economies of the Greek Cypriot community (GCC) and the Turkish Cypriot community (TCC) will continue to lack economies of scale, while the very large and promising new markets of Turkey for the GCC and the EU for the TCC will remain untapped. These factors will continue to act as a drag on competitiveness, productivity and job creation, especially for women and the young, and will leave both communities vulnerable to economic shocks. In addition, without the catalyst of a settlement of the Cyprus problem, both the GCC and the TCC will most likely continue to suffer from certain results of the Cyprus problem, manifesting themselves in instances of poor governance and the absence of checks and balances.

Even under very conservative assumptions, and under two different forecasting methodologies, the authors find that a united Cyprus settlement would generate a significant boost to tourism, construction, shipping and professional services, with the biggest prize of all going to wholesale and retail trade. Within the first 20 years of a solution of the Cyprus problem, the authors would expect average incomes – gross domestic product (GDP) per capita – to be €6,800 to €11,000 higher than they would be without a solution and economic size (GDP) to be €11 billion to €17.4 billion larger. Under their baseline scenario, real GDP growth would be, on average, 3.8% with a solution and only 2.3% under the status quo.

Reaching the higher end of the forecast will depend on the right mix of policies. These include careful preparation beforehand; ensuring robust institutions; a technical approach to transition periods; addressing potential winners and losers; and last, but not least – as demonstrated by growing international research – closing the gender gap.

The report was funded by the European Union as part of the project “Delivering the Cyprus Peace Dividend – Update 2020” implemented by PRIO Cyprus Centre.