



THE CYPRUS PEACE DIVIDEND REVISITED:

A productivity and sectoral approach

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The Cyprus Peace Dividend Revisited



A productivity & sector-based approach

By

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Outline

- **Current status of GCC & TCC economies**
- **Approach to research**
- **Total Factor productivity (TFP)**
- **Sector-based analysis**
- **Business input**
- **Challenges: maximising the dividend**
- **The overall peace dividend**

Previous efforts on Peace Dividend

- Nathan Associates 2001
- PRIO's Day After I, II, III (2008, 2009, 2010): Mullen, Oğuz-Çilsal, & Antoniadou Kyriacou
- Other efforts, of which a major one unpublished(!).
- This time:
 - Estimate the Peace Dividend using new techniques
 - Link it to efforts in other areas of conflict
 - Update for latest economic developments

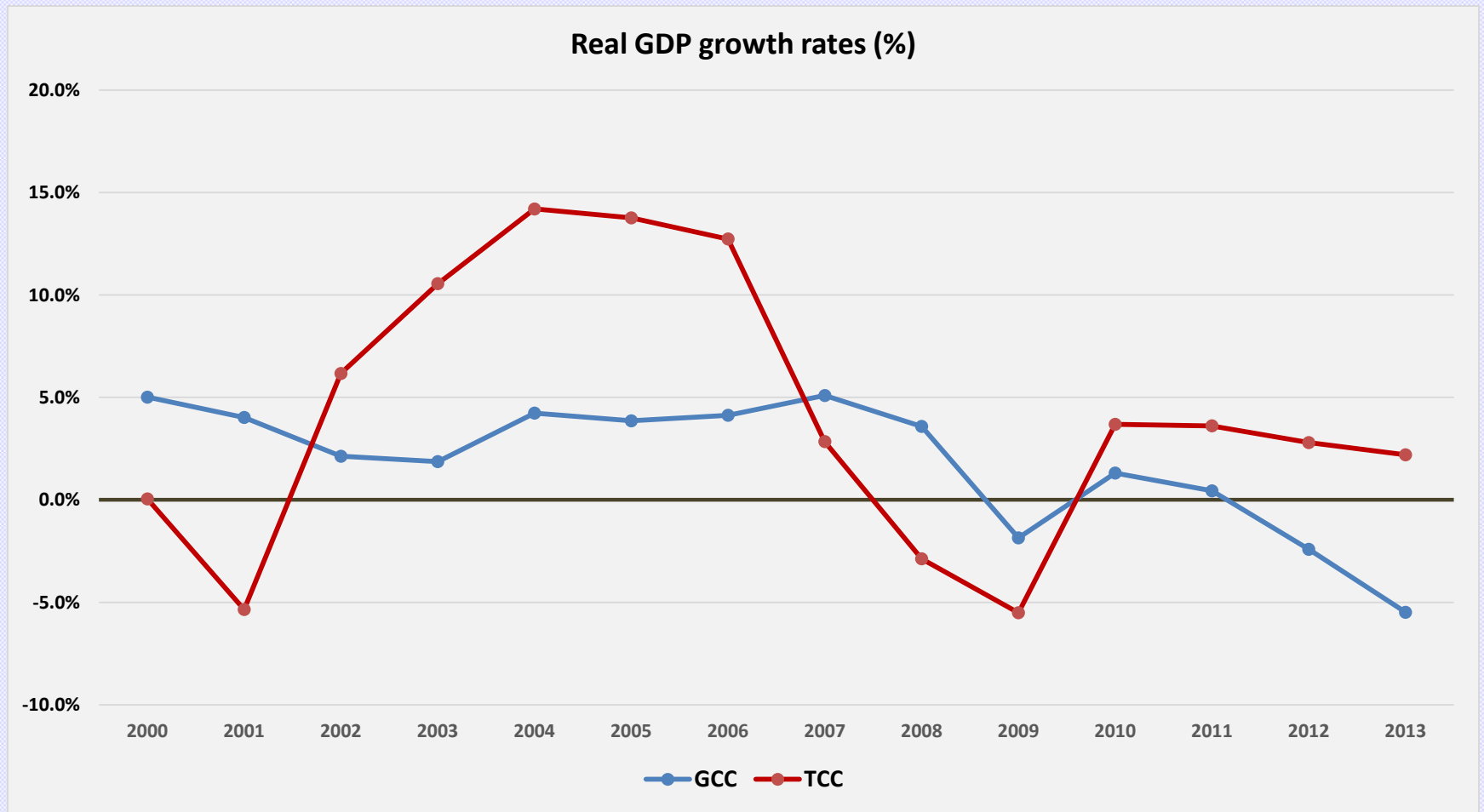
Current status of GCC & TCC economies

(How well will we do without a solution?)

Current status north & south

- Very weak growth for both communities:
 - + 0.3% for TCC 2008-2012 average
 - + 0.2% for GCC 2008-2012 average
- Both very volatile: extreme highs and lows
- Means sources of growth unsustainable
- EU Stability and Growth Pact and new Fiscal Pact violated since 2009

Current status: unsustainably volatile



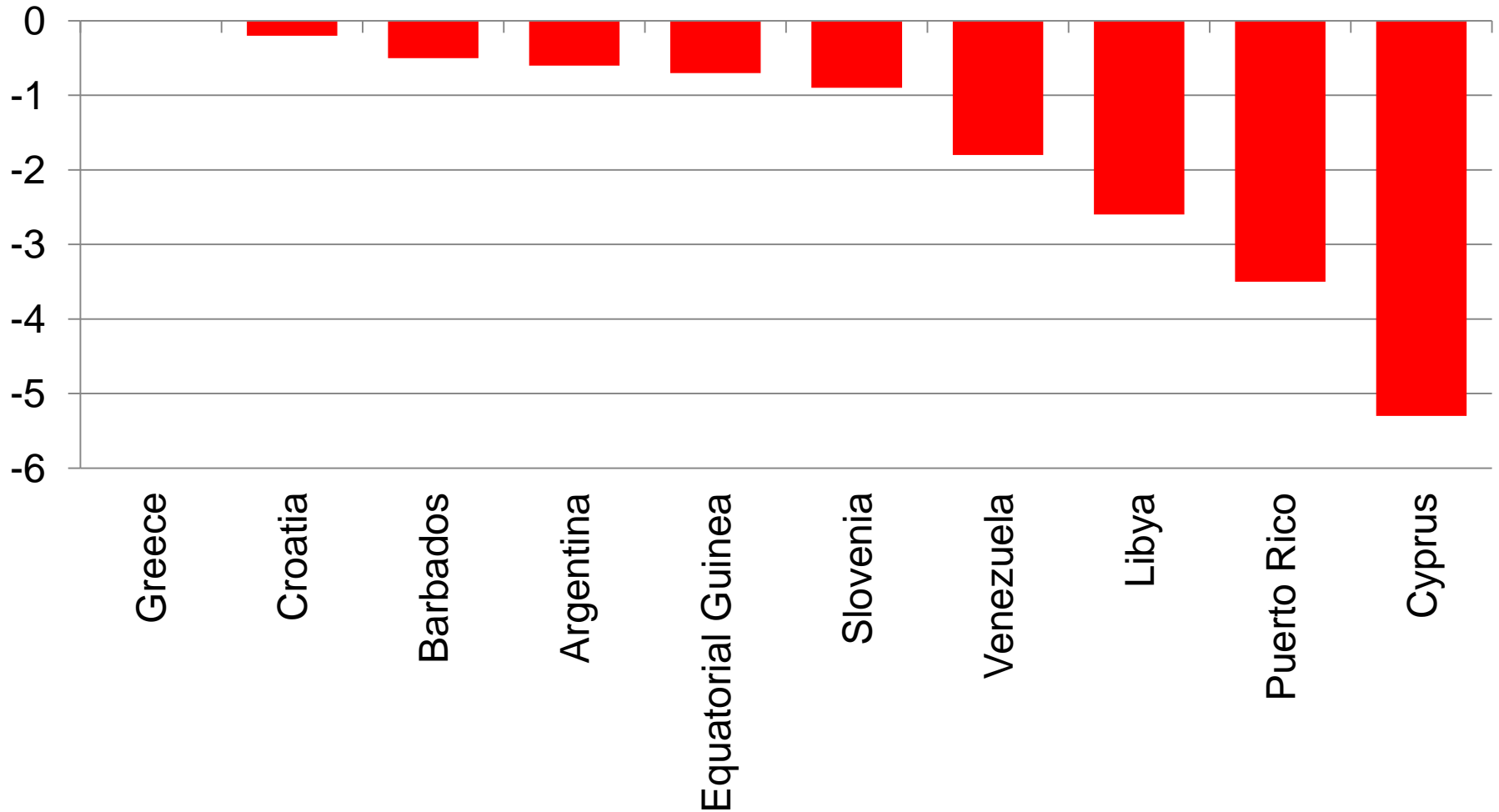
Weaknesses of TCC economy

- Bloated public service
- Still largely aid-dependent
- Lack of direct access to international markets
- Property issue hampers investment
- Volatile: inflation, high interest rates
- Low capacity utilization
- **Failure to increase TFP: minus 0.7% 2005-12**

Weaknesses of GCC economy

- **Before crisis:**
- Weak competitiveness
- **Failure to increase TFP: 0.008% in 2005-12**
- Leading to rising unemployment & debt
- **After crisis:**
- Banking fragility: liquidity & capital
- High household, corporate & govt debt
- Severe long-term effects of deleveraging

The world's slowest growing economies in 2014



Real GDP growth, %. 2014. Source: Economist Intelligence Unit.

Won't gas save the GCC economy?

Gas export date too optimistic

- **Officials said first gas exports: 2020**
- **Sapienta expects first gas exports: 2028**
- **Why?**
- **Need at least 7 tcf confirmed v. 4.5 tcf today**
- **Add 2-3 years to confirm drilling: 2016-17**
- **Add 1 year for financing and FID: 2017-18**
- **Add 10 years to build: 2027-28**

LNG viability test

Commercial viability thresholds for LNG		
Sapienta Economics estimates		
	NPV value	NPV pass/fail
Viability at 5 tcf	5 tcf	5 tcf
CNG	€6,284	PASS
Pipeline to Turkey	€1,312	PASS
LNG to Asia	-€817	FAIL
LNG to Europe	-€1,548	FAIL
Pipeline to Greece	-€2,561	FAIL
Viability at 7 tcf	7 tcf	7 tcf
CNG	€9,835	PASS
Pipeline to Turkey	€3,858	PASS
LNG to Asia	€479	PASS
LNG to Europe	-€627	FAIL
Pipeline to Greece	-€909	FAIL

Source: Sapienta Economics.

Israel pursuing its own options

- Jan: ag't pipeline Lev->Palestinian Authority
- Feb: ag't pipeline Tamar->Jordan
- Mar: 10 bids for pipeline Lev->Turkey
- May: prelim ag't pipeline->Egypt (idle LNG plant)
- May: Noble says FLNG for Leviathan
- => **Sharing Vassilikos now highly unlikely**

Conclusions on gas

- Biden talked of Cyprus as “key player” in gas
- But Israel pursuing own options
- “Regional” has to include Turkey
- Israel could sell CNG to Turkey (no need for Cyprus and pipeline)
- =>Regional role in energy looks likely to pass Cyprus by without a solution of the Cyprus problem

Approach to research

Underlying assumptions

- **Based on the joint declaration (federation)**
- **Many unknowns but indications to assume:**
- **A functioning governance system, albeit with new challenges, which we also address**
- **Measures to minimize debt-financed compensation**

Timeline of a solution

- **Stage I** (Years Y1, Y2): Signing of Cyprus settlement and a period of preparation. **Starts 2016.**
- **Stage II** (Years Y3-Y7): Peak investment period: the majority of the settlement-related investment (transport, buildings, utilities and the construction of necessary infrastructure) takes place.
- **Stage III** (Years Y8+): Normalisation period: major programmes of the transition period are completed and issues of restitution and development addressed.

Two approaches for “with solution”

- **A) Total Factor productivity (TFP)**
 - A growth accounting /productivity approach (latest academic theories)
- **B) Sector-based (bottom up)**
 - A sector-by-sector approach (more interest to business)
- **Geometric mean of two independent approaches, A and B = “with solution” growth**
- **“As simple as possible without being simplistic”**

TFP v sectoral: tortoise v. hare



**Sectoral highlights short-term, TFP highlights long-term.
Remember who won the race?**

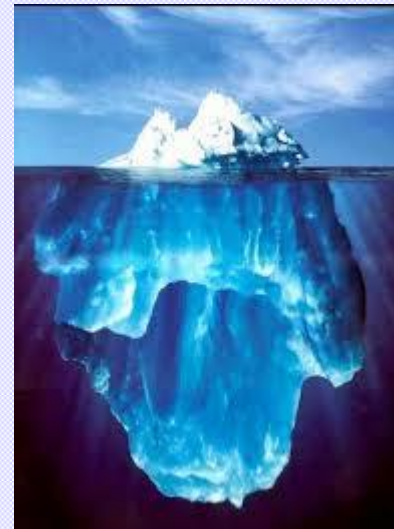
Is Total Factor Productivity important?

- Very much so!
- It's how (eg) Korea & Japan did it
- 47% of Japanese growth in the period 1960-1995 was due to TFP increases
- It is how advanced economies keep growing
- It's the real, long-term, *sustainable* benefit for Cypriots
- Comes through many factors, inc. technology:
 - Greater worker output with same resources.

How do you find the effects of peace?

- Pinpoint the effects of conflict
- Conflicts damaging in more ways than commonly understood
- In a frozen conflict it is sometimes hard
- Like an Iceberg: Known cost →

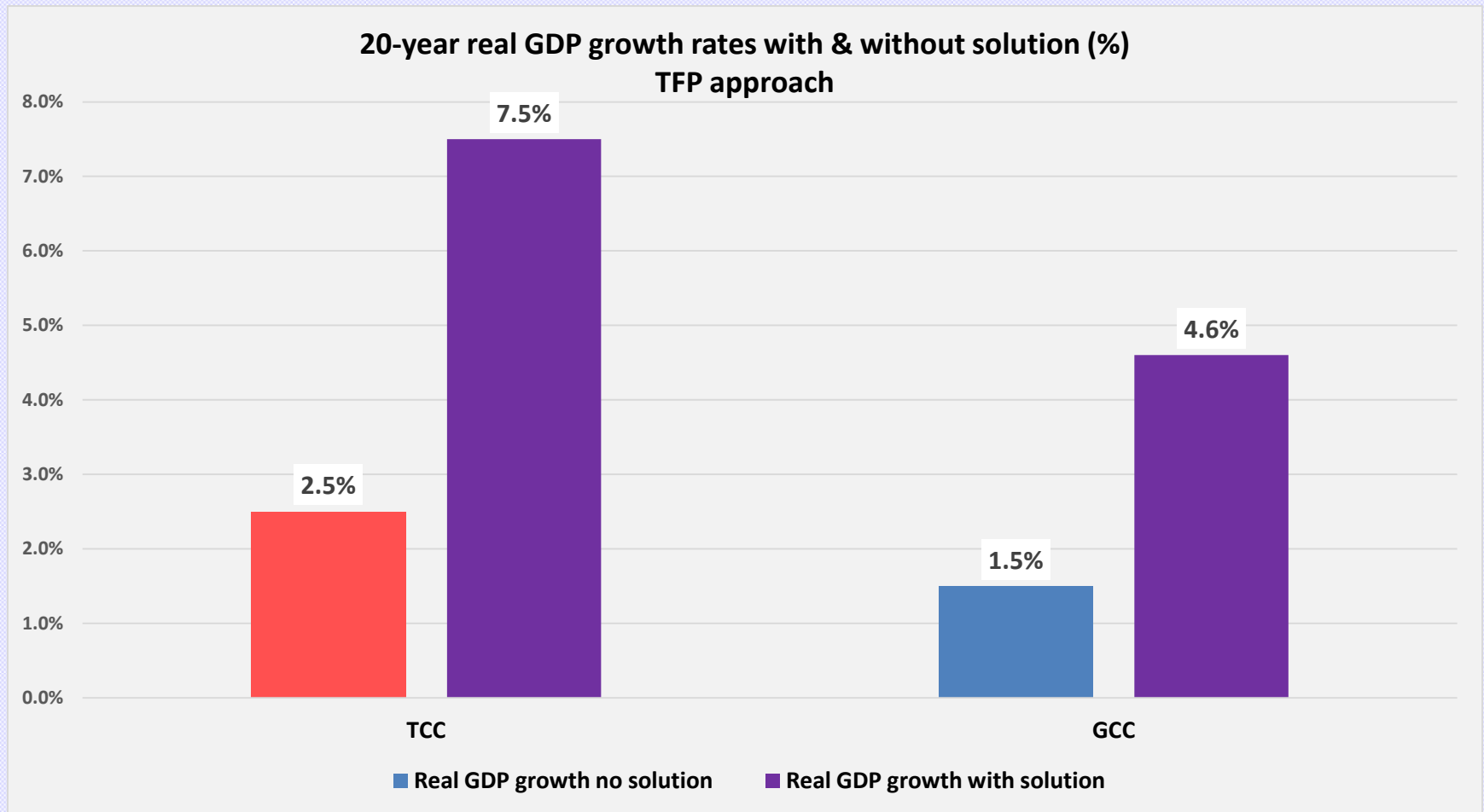
More severe unknown cost →



Growth accounting methodology

- **Step 1:** Find current proximate causes of economic growth (GDP per worker)
- **Step 2:** Add the advances in productivity and capital inflow that would arise in the three stages of a solution
- **Step 3:** Convert such estimates from GDP per worker to GDP estimates we can all understand and evaluate

What TFP says about growth prospects with solution



Sector-based analysis

- A bottom-up approach to construct GDP
 - Independent from the TFP approach so adding strength to our efforts
 - Relatively more solid and more appealing for business people
 - Informative and understandable
 - Policy oriented including legal and institutional arrangement
 - Shows comparative advantage and potential

Basis for “with solution” sector forecasts

- Based on previous boom years 2002-06
- Partly related to political developments
 - TCC: expected solution to Cyprus problem
 - GCC: Benefits of EU harmonisation & EU membership
- High growth rates in the region as well as around the world

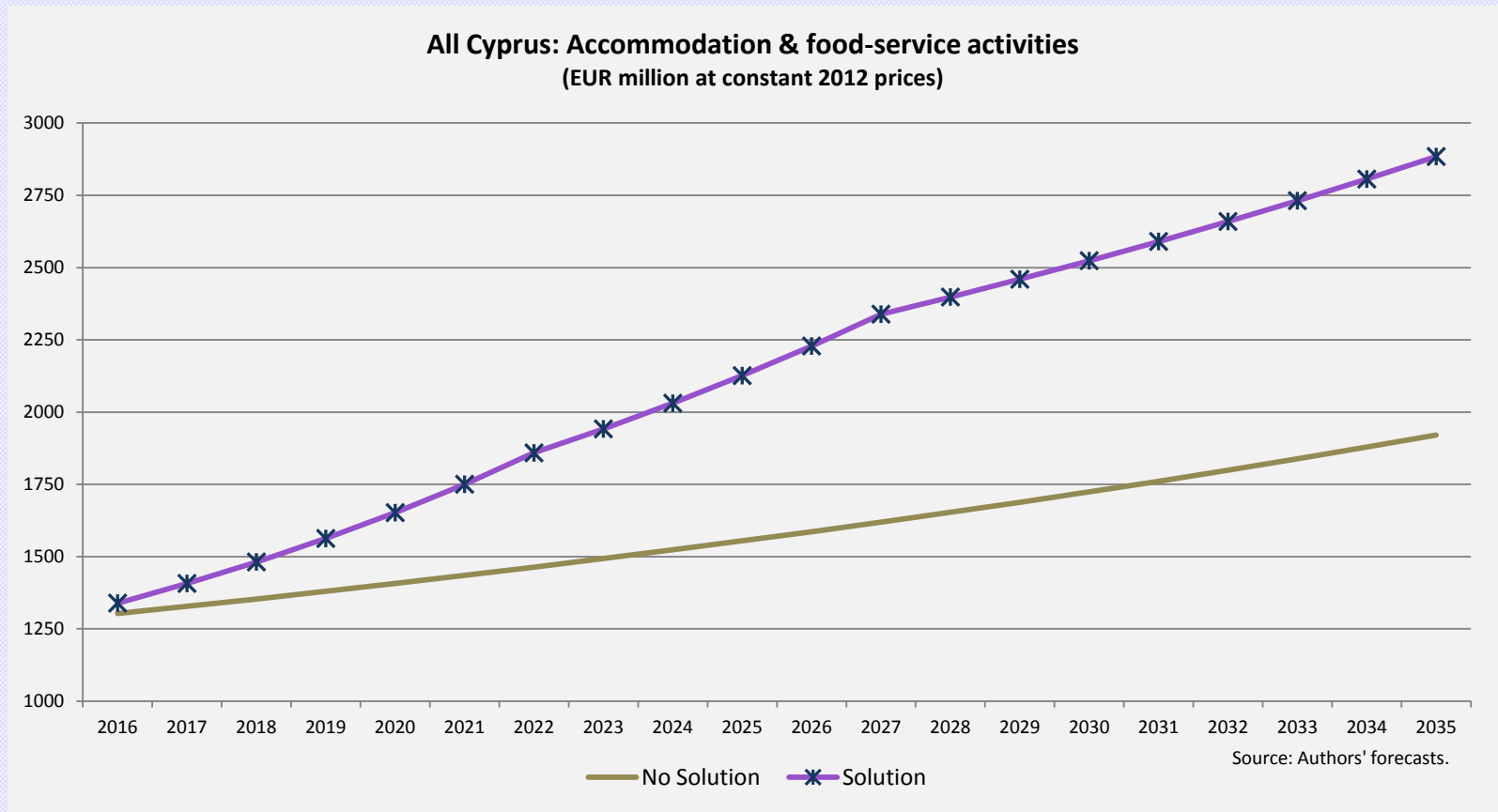
Then we reduce to reflect new realities

- **Stage 1 (2016-2017)** Signing and preparation
 - The average growth rate for 2002-2004, tapered by 10%
- **Stage 2 (2018-2022)** Peak investment period
 - Higher sectoral growth rates similar to 2004-2006, tapered by 20% TCC, 12% GCC
- **Stage 3 (2023-2035)** Normalization and convergence
 - **Stage 3a (2023-2027)**: 75% of stage 2 for GCC and 66 % for TCC
 - **Stage 3b (2028-2035)**: both economies will converge in terms of growth rates

Annual average boost by key sector

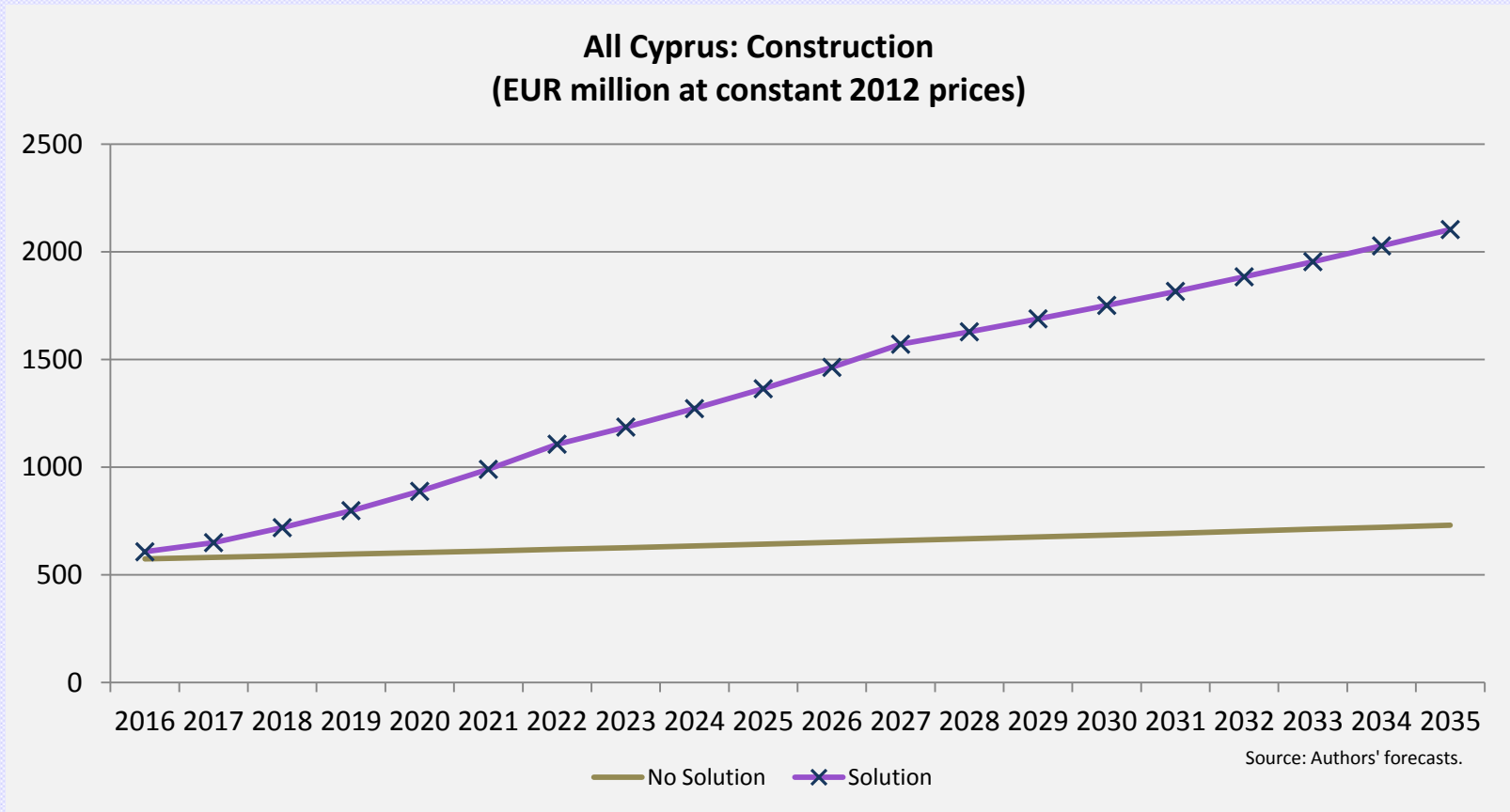
Annual average peace dividend over 20 years			
EUR million at constant 2012 prices			
	GCC	TCC	Total
Wholesale & retail trade	869	415	1284
Professional, scientific & technical	561	458	1019
Transportation & storage	506	255	761
Construction	336	389	725
Accommodation & food services	133	420	553
Financial & insurance activities	230	149	379
Education	159	109	267
Electricity, gas & water	169	85	254
Manufacturing	170	73	243

A bigger regional tourism market



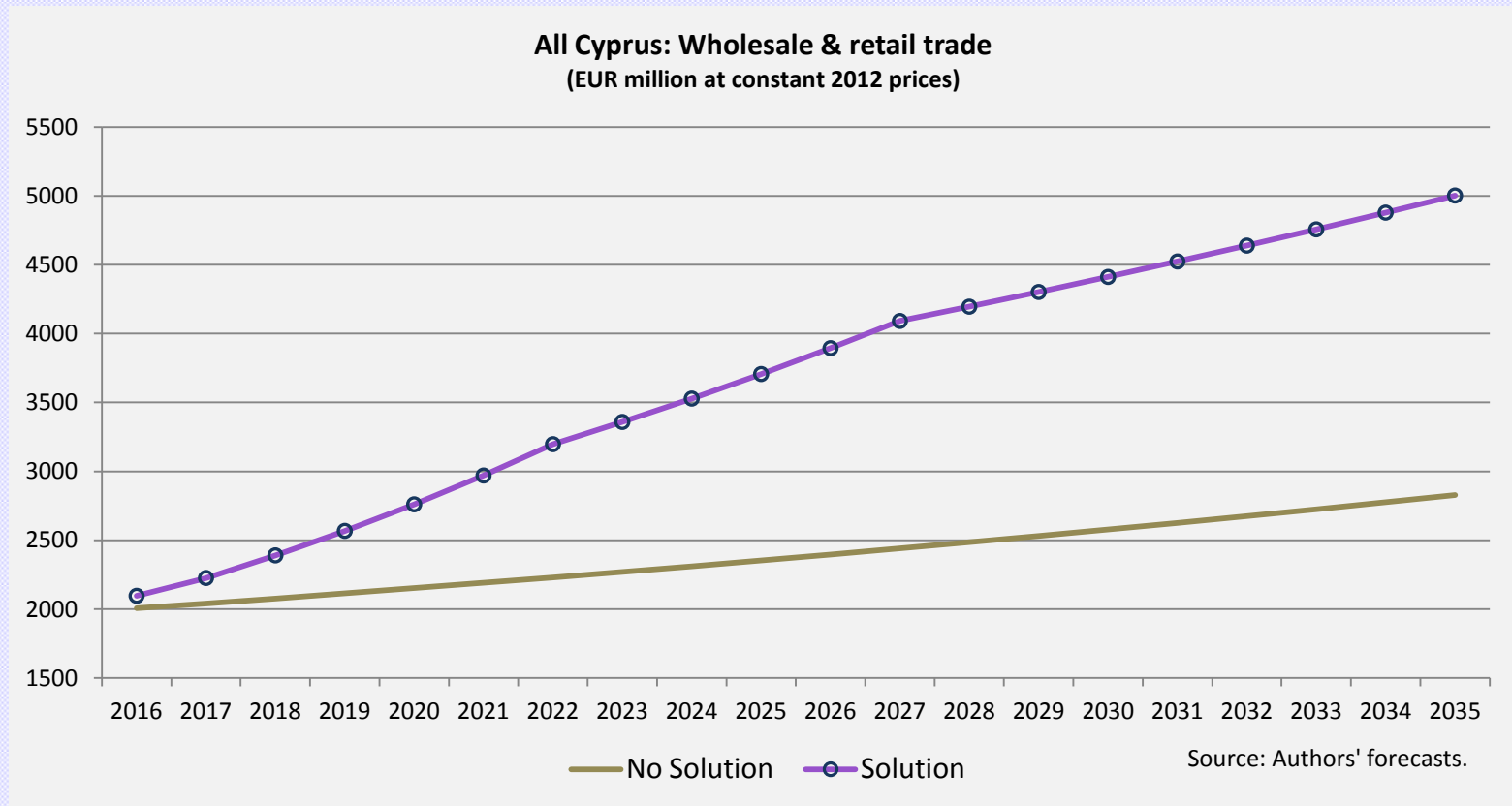
- **Utilization of the opportunities of a wider tourist product: health, agro tourism, ecotourism, religious**
- **Lower flight costs and easier access to new markets**
- **Additional €553m per year ave over 20 years, €133m GCC; €420m TCC**

Building a united country



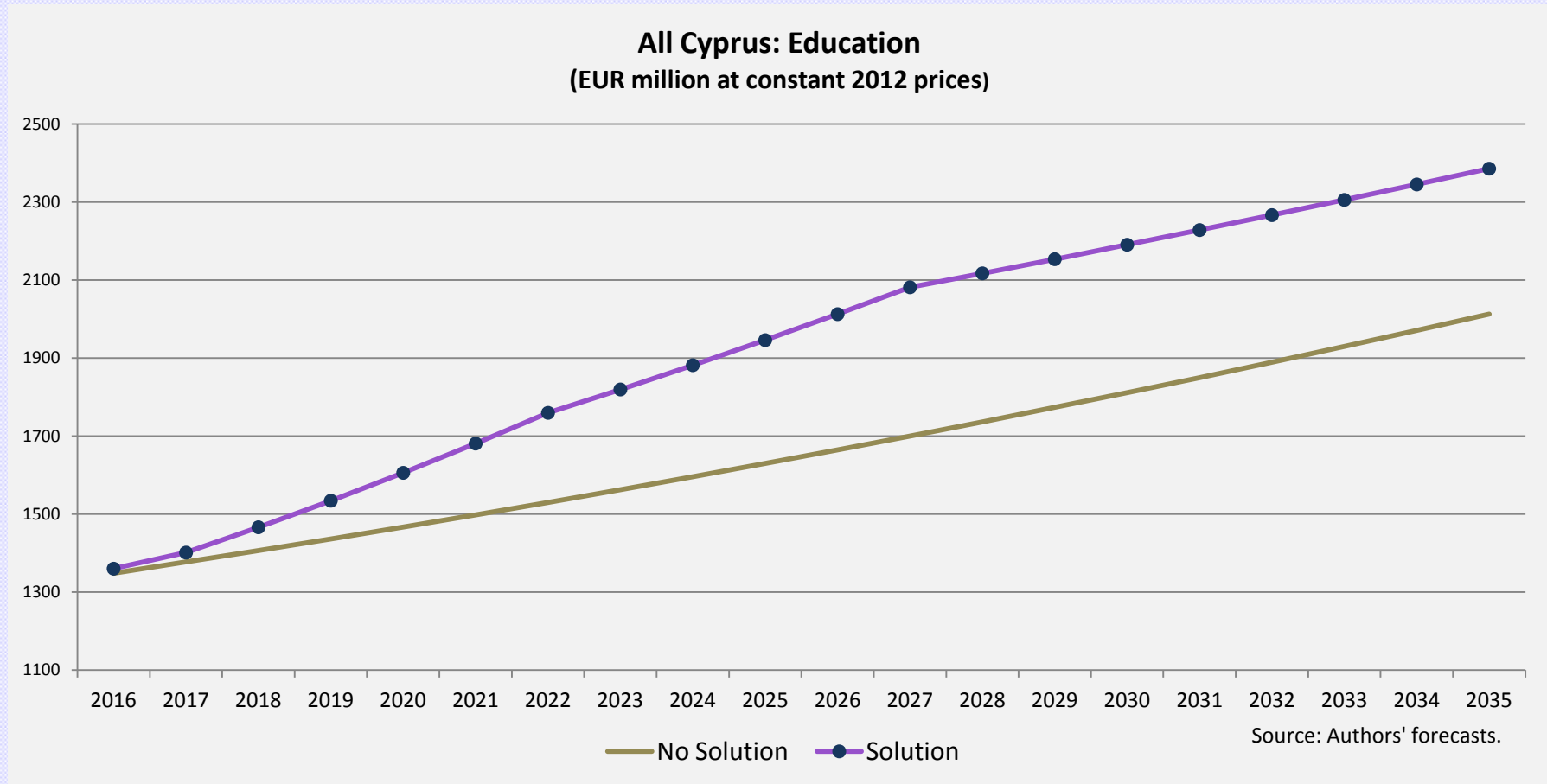
- **Settlement will involve significant amount of construction**
- **Including new housing, rebuilding, upgrading of ports etc.**
- **Additional €725m per year ave over 20 years, €336m GCC; €389m TCC**

New trading sources for wholesale & retail



- **Reduced transportation costs and new trading destinations will have significant effect on TCC economy & create very large new destination for TCC economy**
- **Spin-offs from additional tourism and higher incomes**
- **Additional €1,3 bn per year on ave over 20 years, €869m GCC; €415m TCC**

A “Cyprus brand” higher education hub



- **A united Cyprus can help create a strong & complementary brand in Cyprus**
- **Students from Near East and Common Wealth of Independent States**
- **Additional €267m per year ave over next 20 years; €159m GCC; €109m TCC**

Business leader feedback broke new ground

- **First time business consulted on solution forecasts**
- **Sensitive issues discussed, practical solutions put forward**
- **Joint statement pledged cooperation in support of talks**
- **Improved our research**
- **Introduced ideas to support negotiations**

Business input

- **Brand Cyprus: “One country, many cultures, a unique identity”**
- **“Alone we can win prizes but together we can win the championship”**
- **Incentives for joint ventures in retail**
- **Cross-recognition creates regional education hub**
- **TR-CY investment and tax treaties, open skies**
- **New opportunities for Famagusta port**
- **“The bigger the vision, the easier to finance”**

To summarise the sectoral benefits

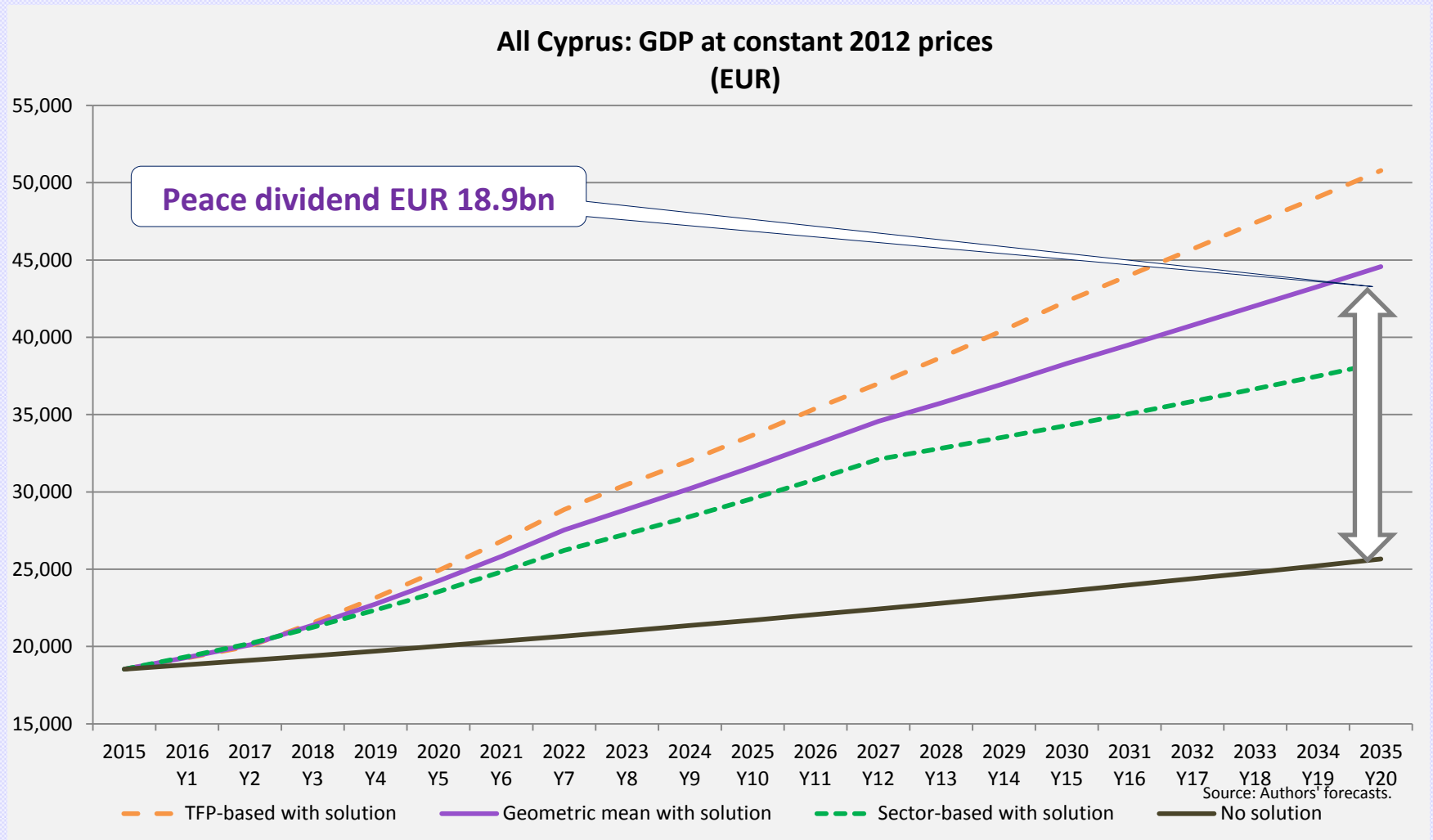
- **Each community has relative strengths**
- **Each community will benefit**
- **All sectors will benefit**
- **Biggest gain: Retail/wholesale & Professional services & construction and transportation**

Challenges: maximising the dividend

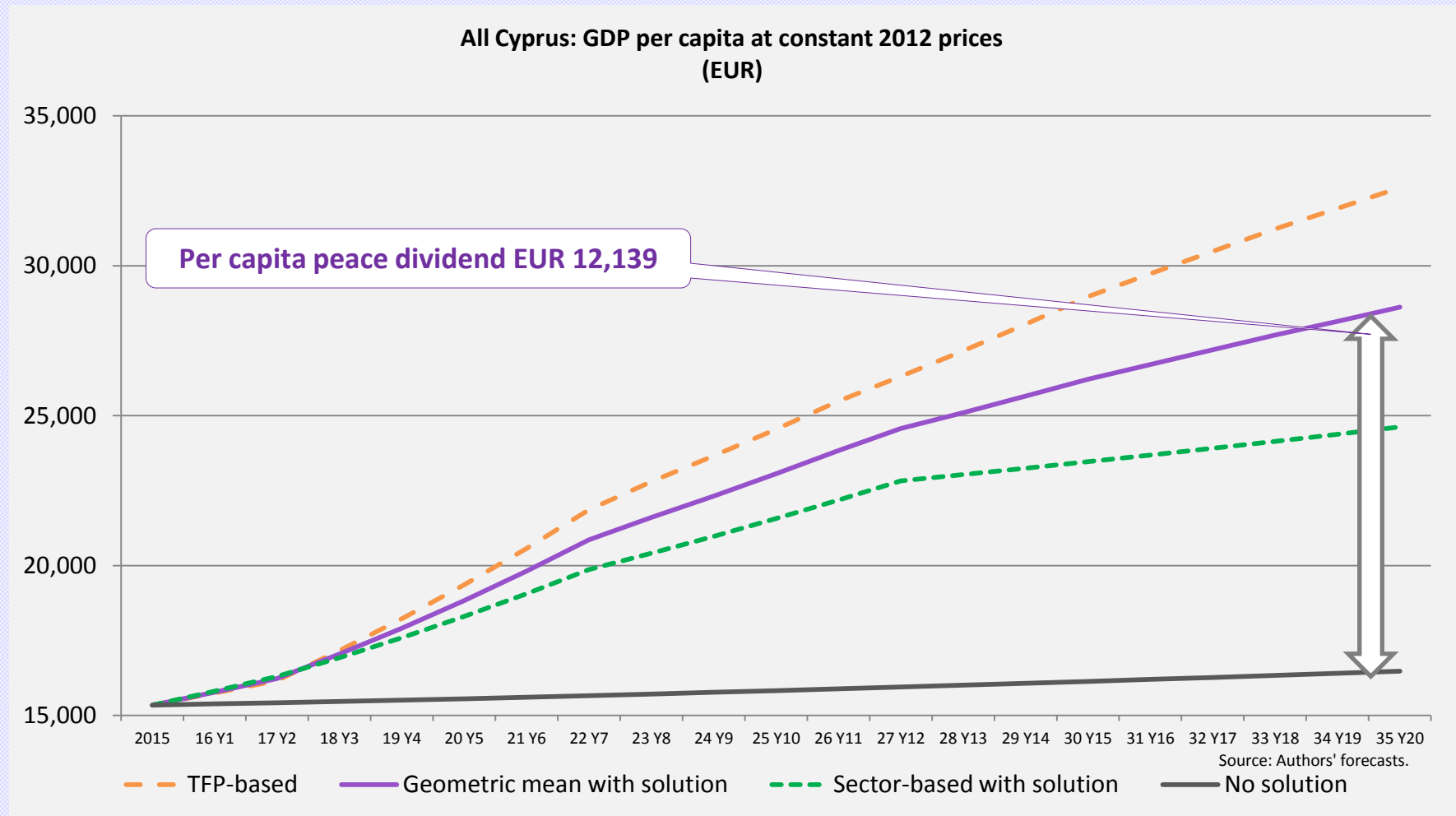
- **Matching resources to competences**
- **Minimizing debt-financed property settlement**
 - **Need to examine private-sector solutions**
- **Preparing TCC for competition and acquis**
- **Statistics: resources needed**
- **Addressing debt issues**

The overall peace dividend

An extra €18.9bn at today's prices by Y20

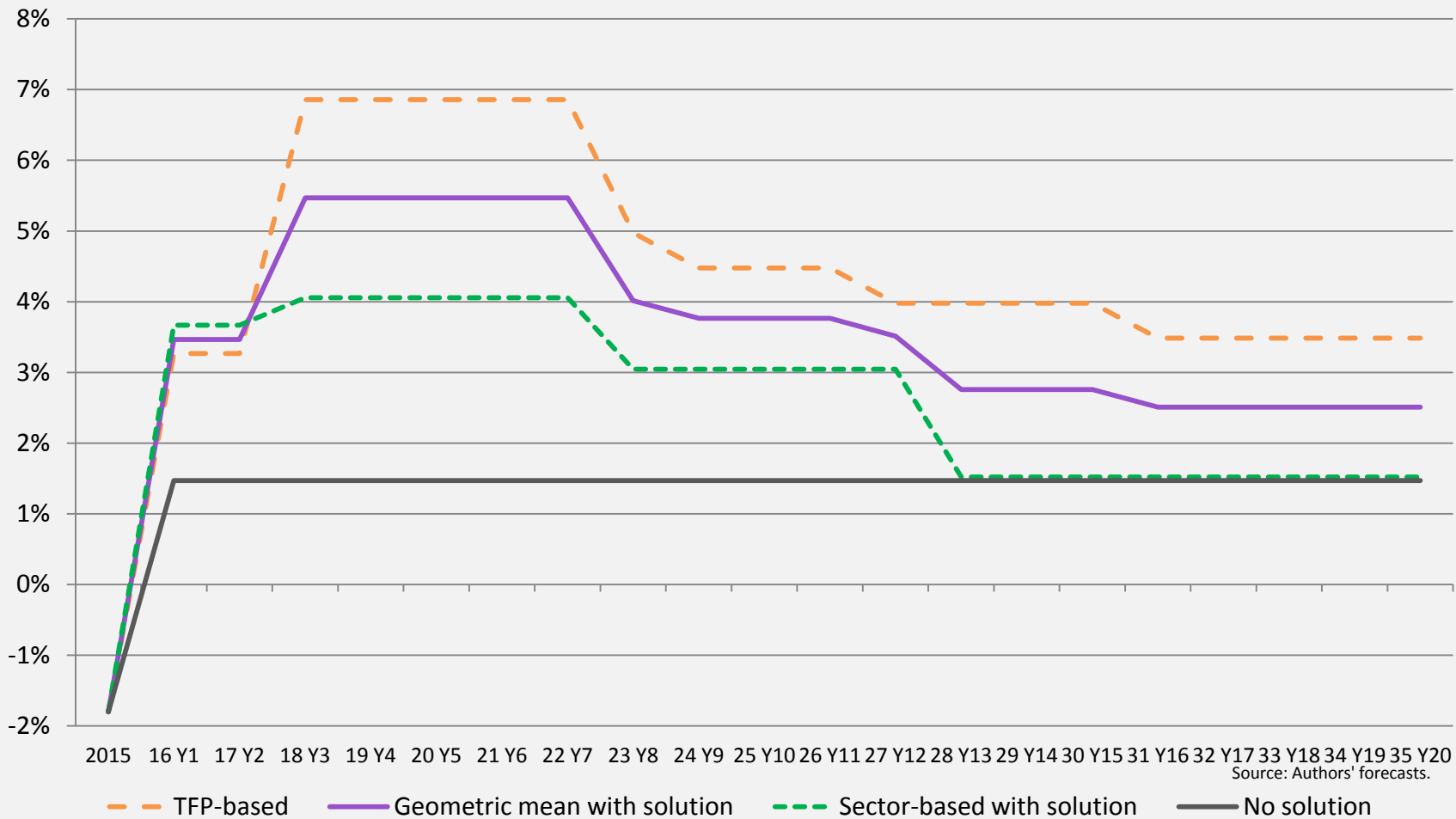


Extra €12,139 at today's prices to per cap incomes

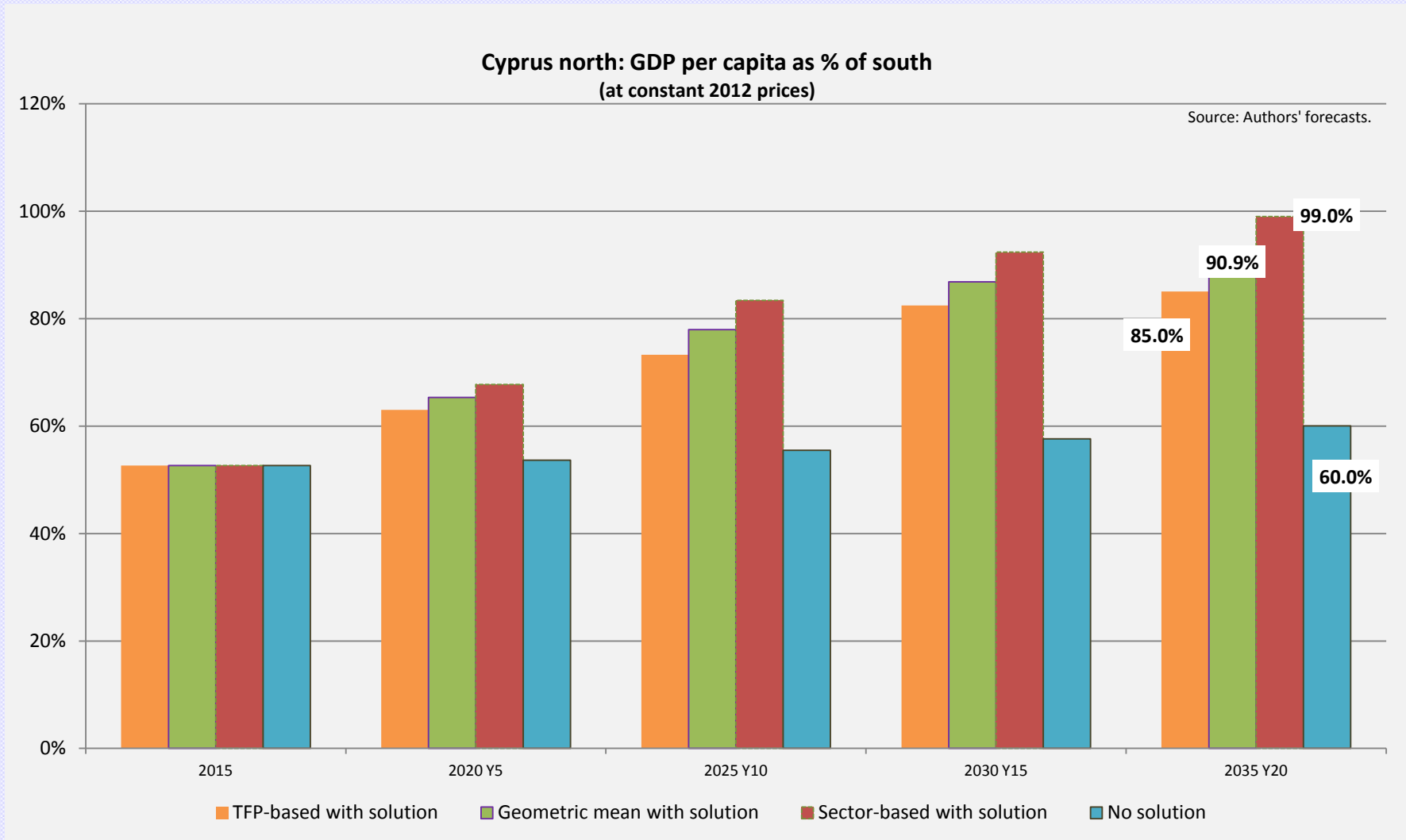


An extra 2.8 % points to average growth

All Cyprus: real GDP growth
(% change over the same period of the previous year)



Convergence of incomes



Maybe that *is* light on the horizon!



Thank you for listening...