

Seminar on the Measurement of Progress, Development and Well-Being
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The Easterlin Paradox and the Measurement of Well-Being

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Three measures of well-being

- Happiness
- Life satisfaction
- Objective data: mental illnesses, suicides, alcoholism, drugs abuse, psychopharmaca, etc.

Happiness and life satisfaction are called Subjective Well-Being (SWB)

Happiness questions (World Values Survey)

Taking all things together, would you say you are:

- 1 'Very happy'
- 2 'Quite happy'
- 3 'Not very happy'
- 4 'Not at all happy'

Life satisfaction questions (World Values Survey)

All things considered, how satisfied are you with your life as a whole these days?

- 1 'Dissatisfied'
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10 'Satisfied'

Reliability of Happiness

Happiness is well correlated to:

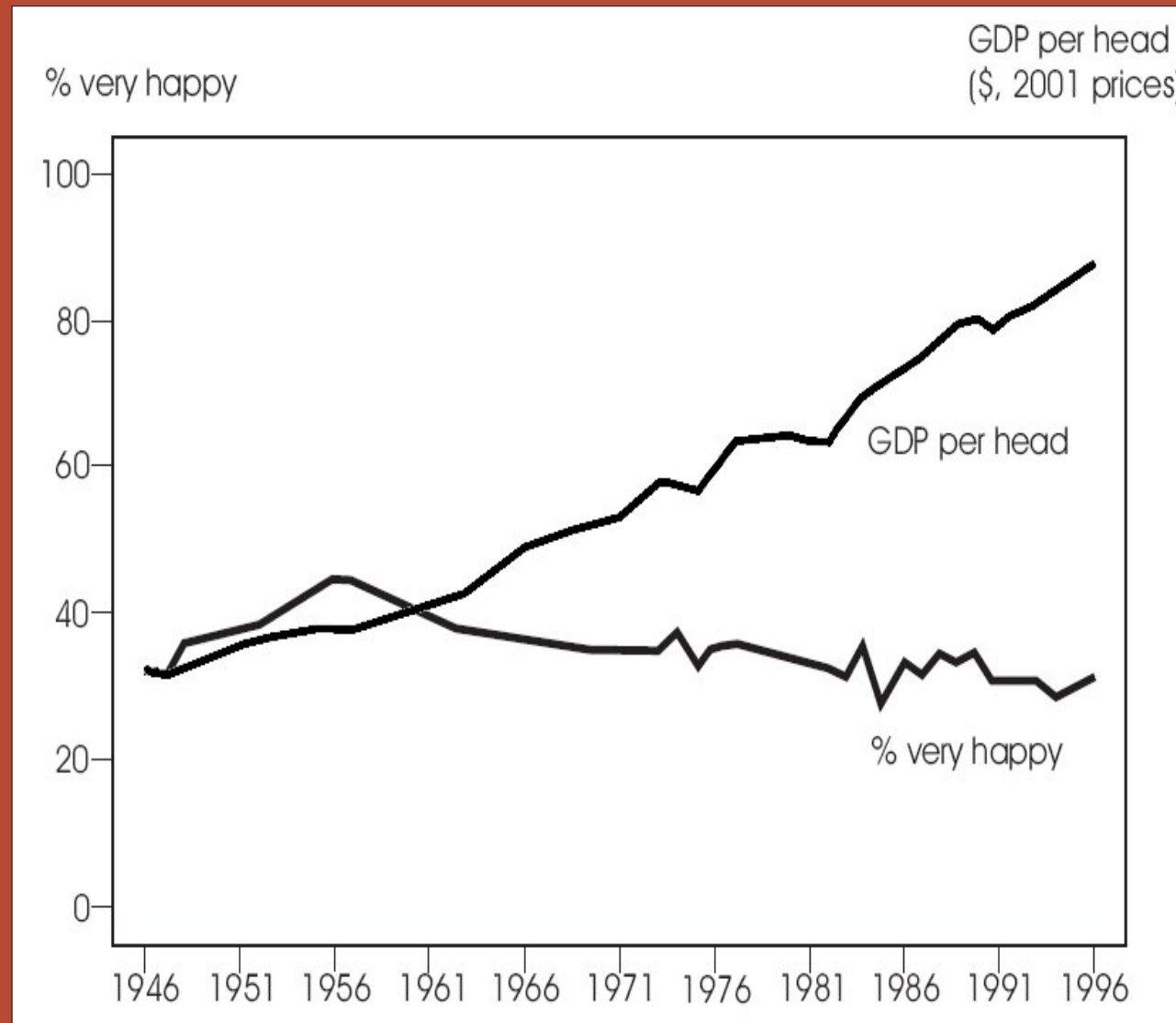
- Authentic smiles (so called Duchenne smiles: this latter occur when the zygomatic major and orbicularis oris facial muscles fire, and humans identify this as 'genuine smiles').
- Heart rate
- Blood pressure
- Psychosomatic illnesses such as digestive disorders and headaches
- Electroencephalogram measures of pre-frontal brain activity
- Suicides
- Assessment of the person's happiness by friends and family members
- Assessment of the person's happiness by her/his spouse

The evolution over time of subjective well-being

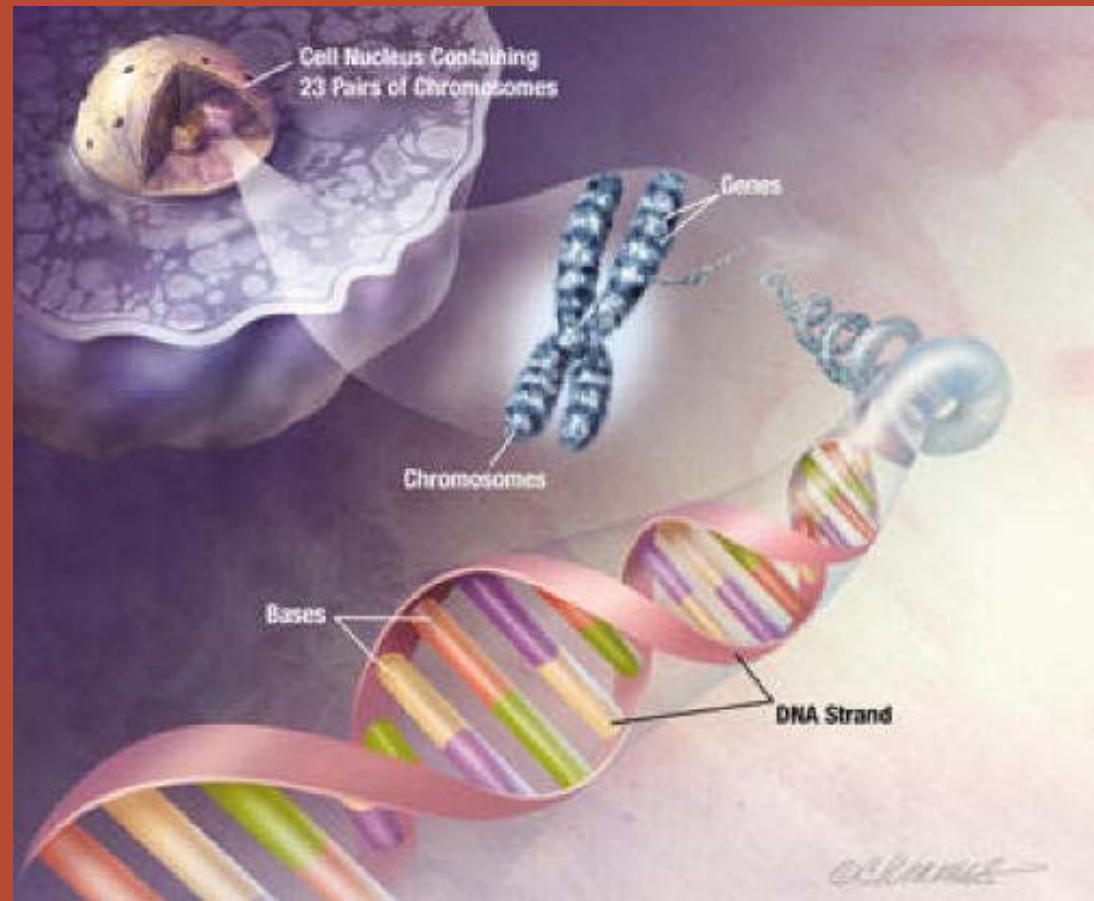
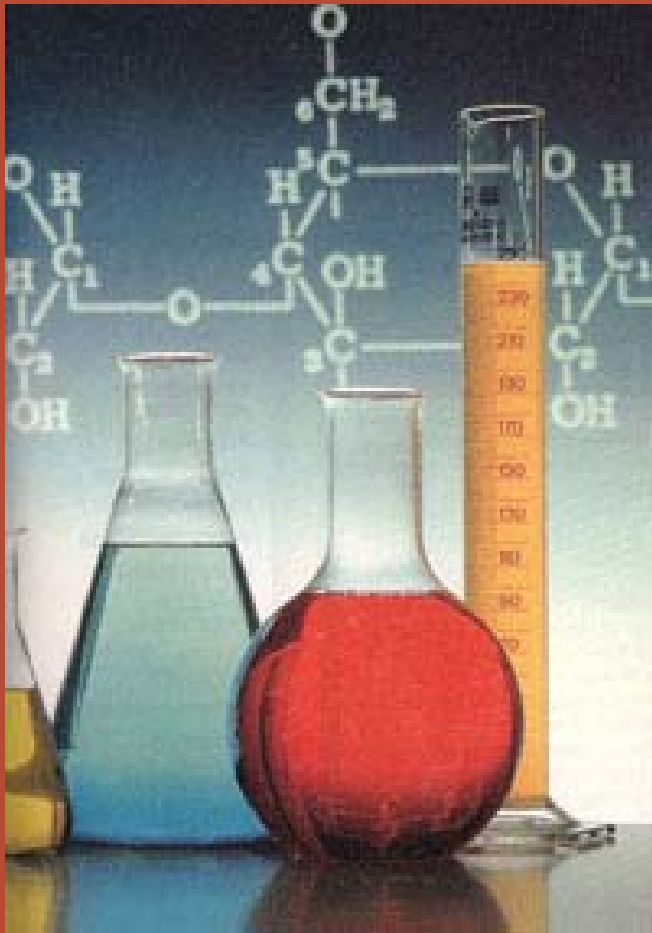
- How far is general income growth likely to increase average happiness?
- This is a question about time series relationships

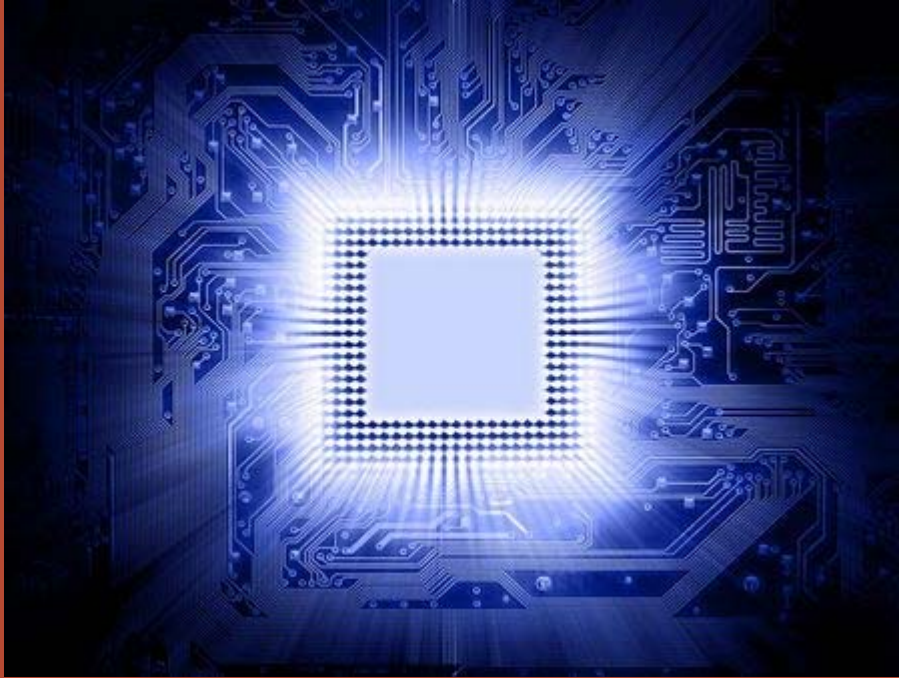
GDP and happiness, US, 1946-1996

The Easterlin paradox



Health





Information technologies





Travels



But...



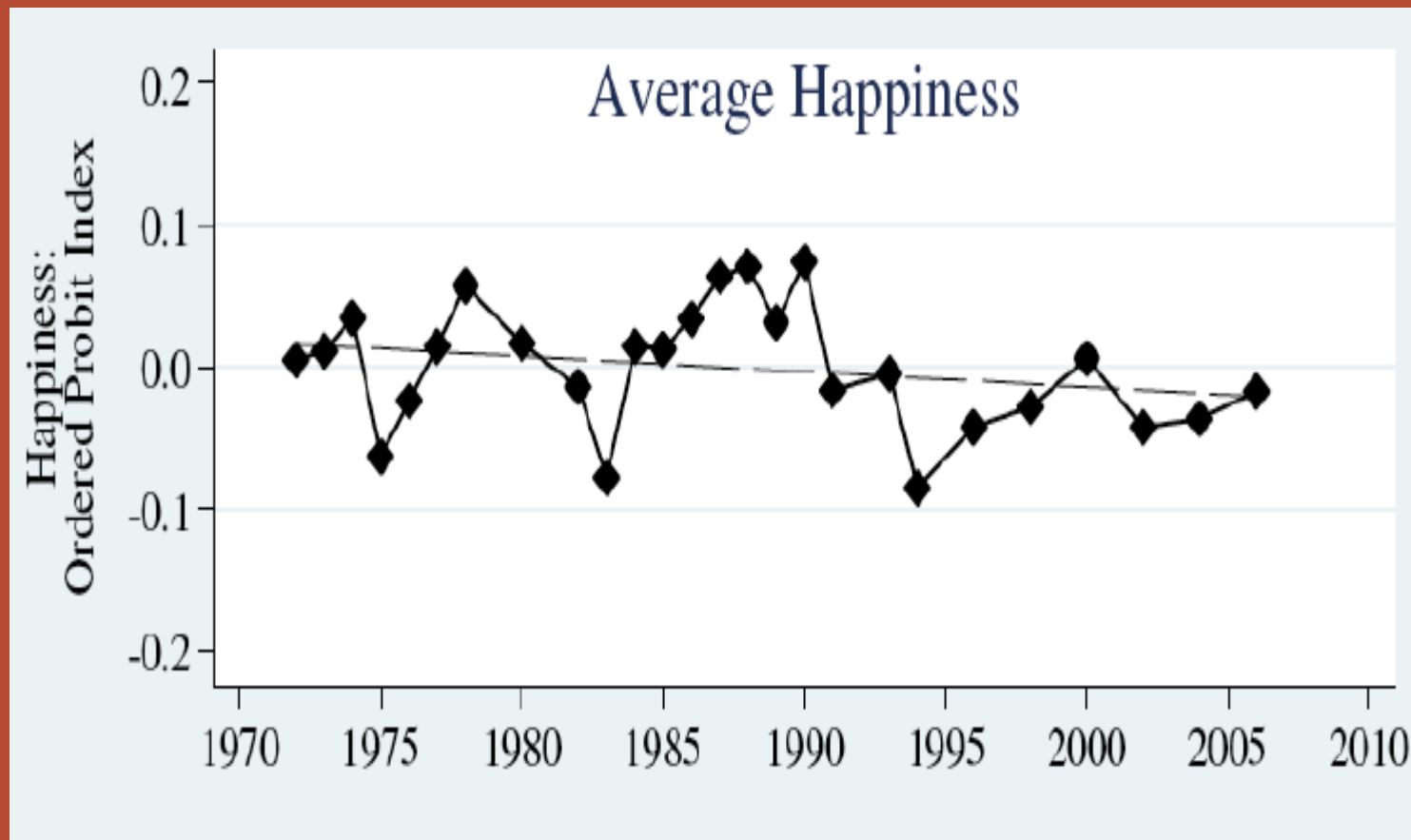


.....economic growth seems to be associated to undesirable side-effects on well-being

Well-being trends across countries

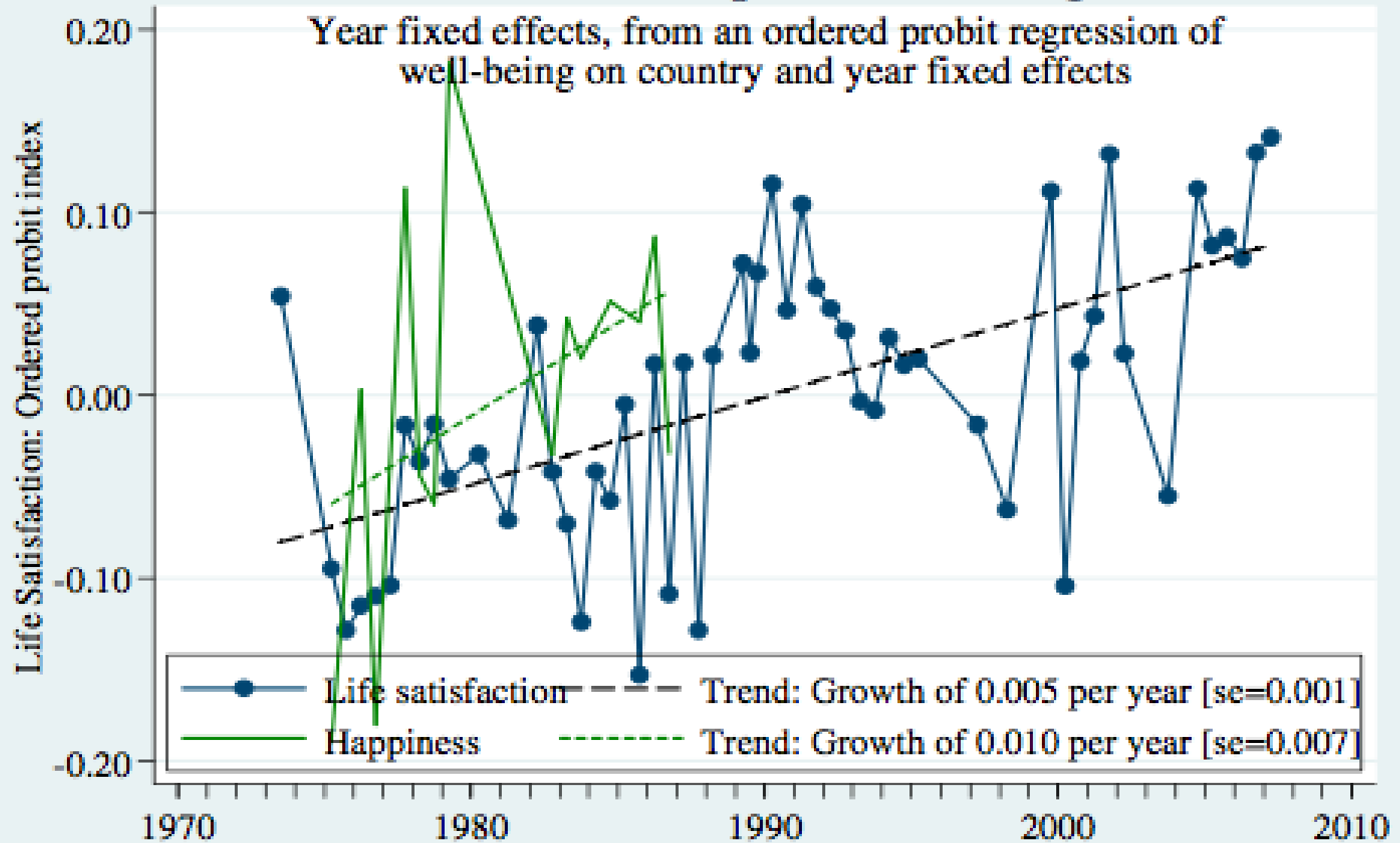
- There are international differences in long-term trends of subjective well-being (SWB)
- For instance: SWB slightly increased in several EU countries and decreased in the US in the last 30 years

Declining Trend in US happiness



Source: Stevenson and Wolfers 2008, GSS data

Trend in European Well-Being



Source: Eurobarometer, 1973-2007.

Source: Stevenson and Wolfers 2008

What does predict the international differences in the trends of well-being?

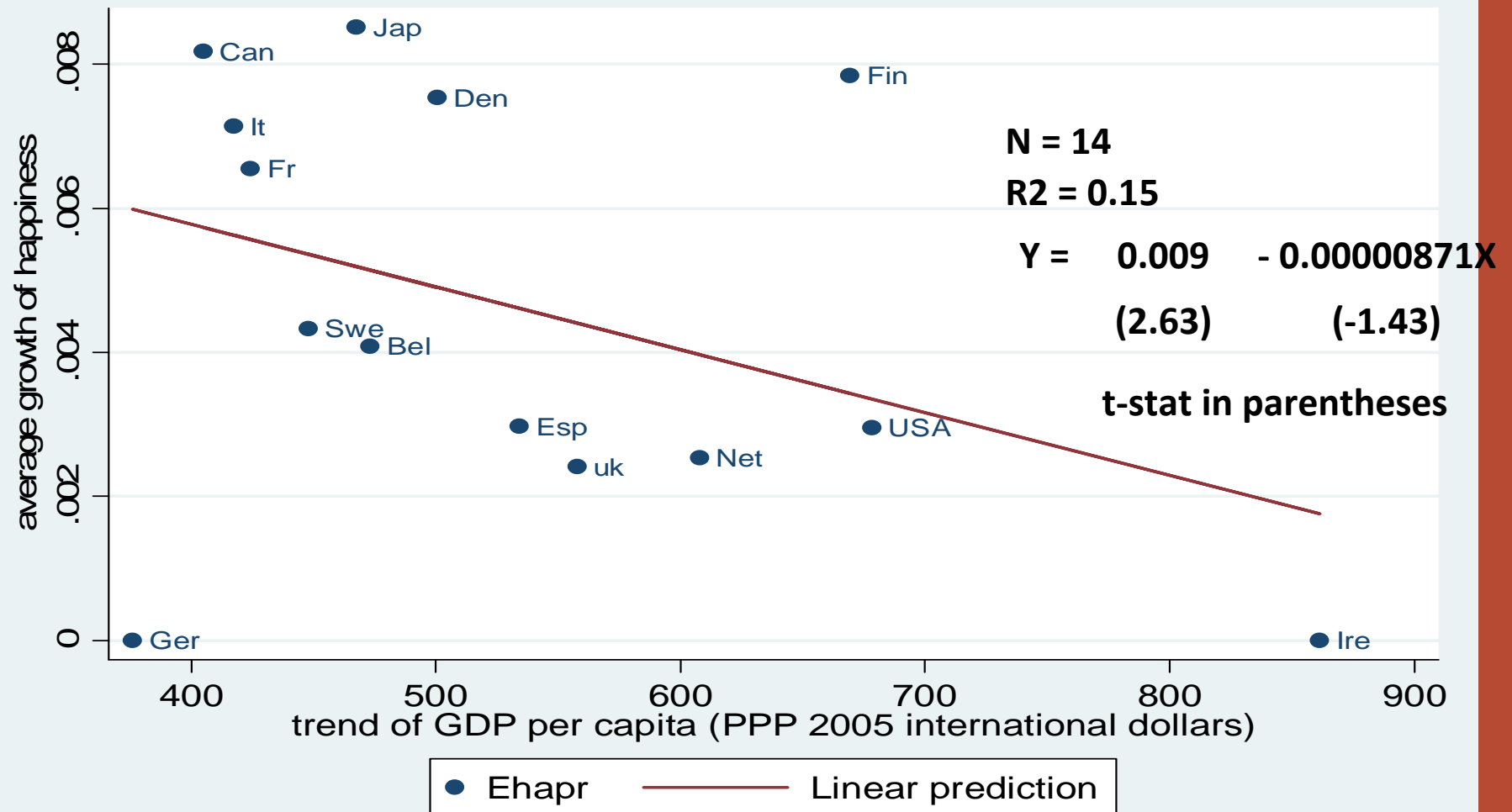
- GDP trends do not
- People do not become happier when a country's income increases.

The Easterlin paradox

- The trends of happiness and income are unrelated in the long run in:
 - developed countries
 - developing countries
 - all countries together

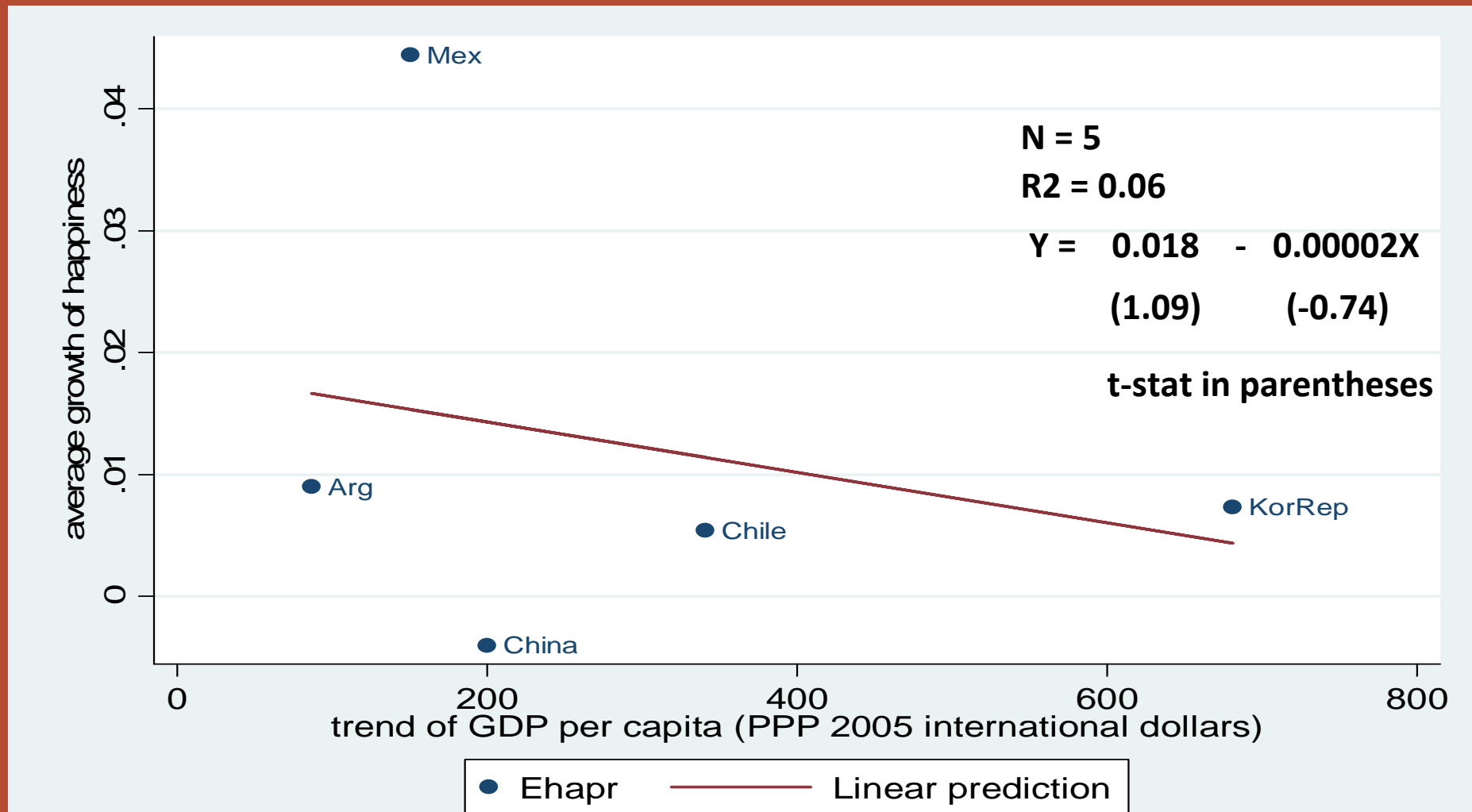
(Easterlin and Angelescu 2009)

Happiness & GDP in Developed Countries



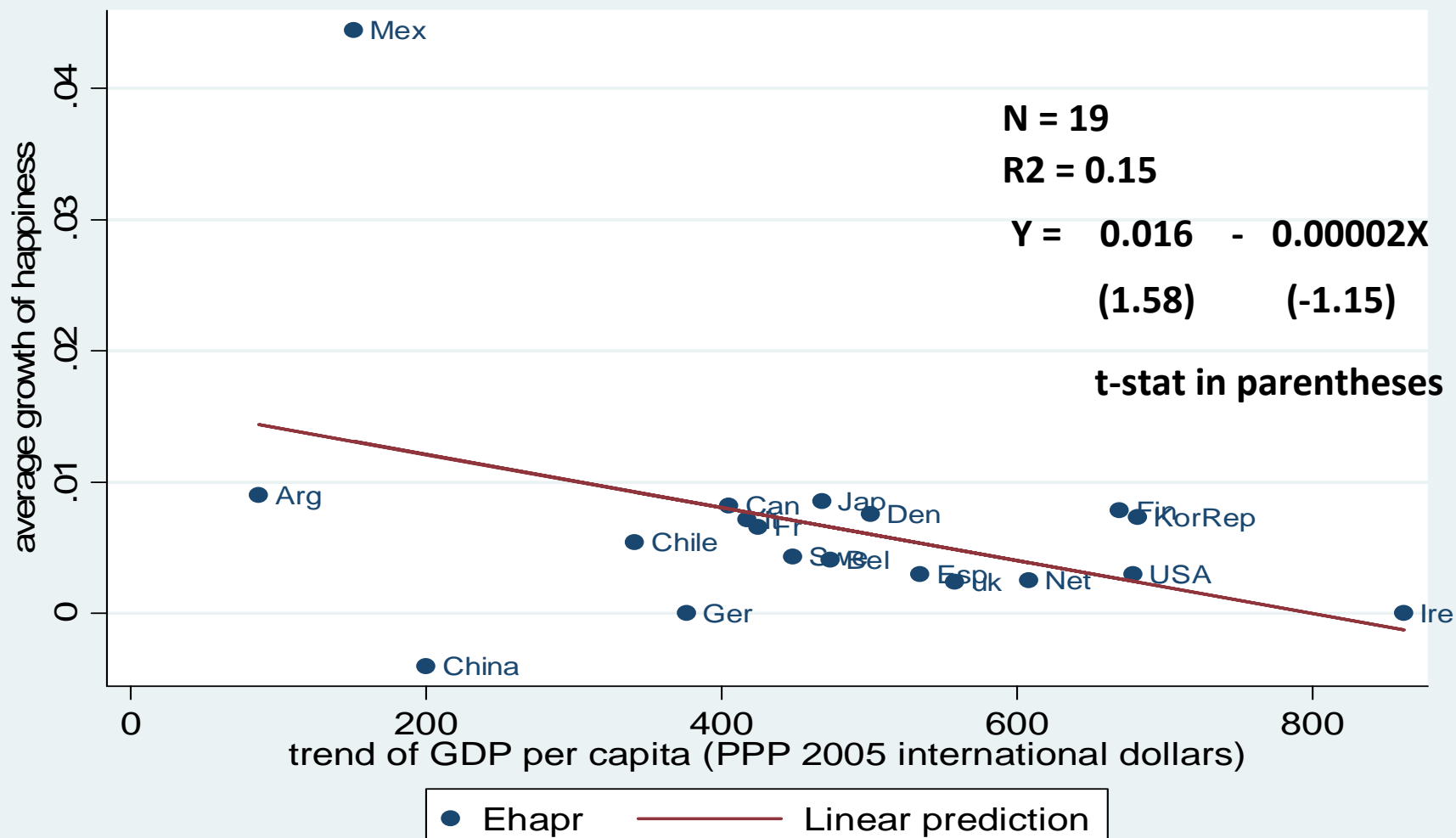
Correlation between trends (15 years)

Happiness & GDP in Developing Countries



Correlation between trends (15 years)

Happiness & GDP in all countries



Correlation between trends (15 years)

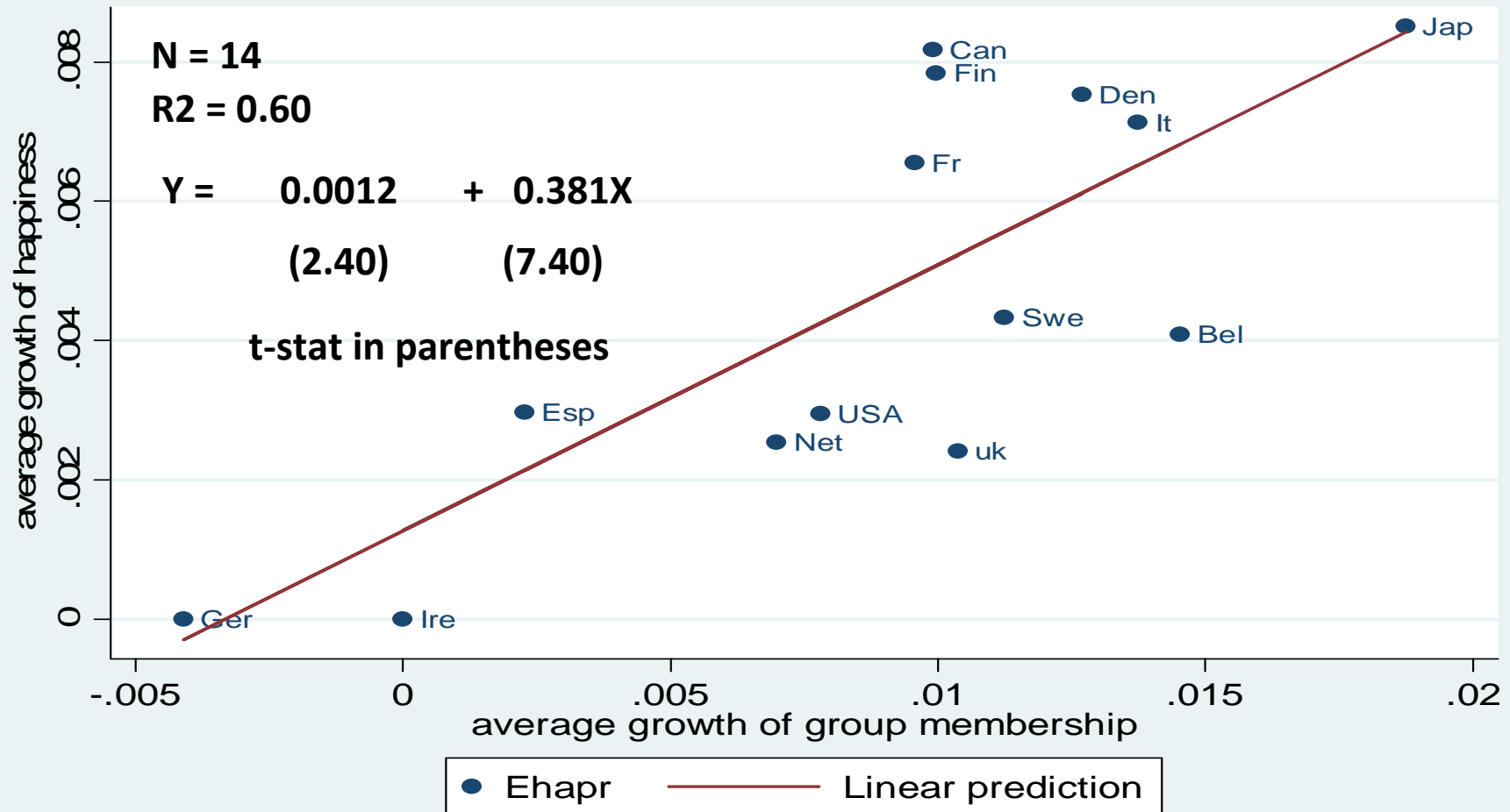
What predicts happiness over the long-run: social capital does

- **What happens** in this kind of regressions **when income is substituted by social capital** as the independent variable? (Bartolini, Bilancini and Sarracino (2009))
- The measure of social capital: share of the population **member in at least one group or association**
- Data: World Values Survey, waves 1-5 (1980-2005)

Groups and associations

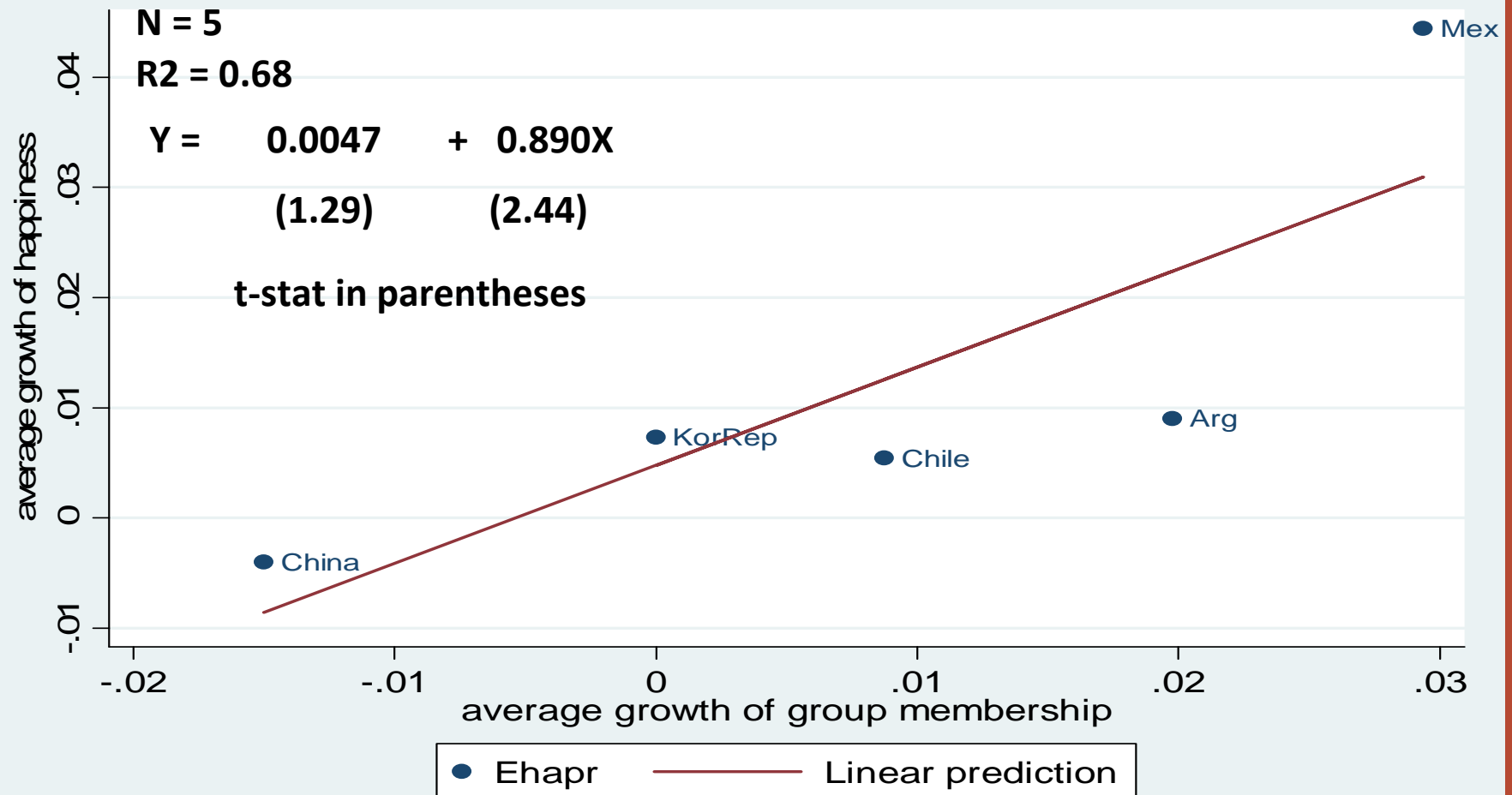
- Social welfare service for elderly
- Religious organizations
- Education, arts, or cultural activities
- Labour unions
- Political parties
- Human rights
- Conservation, the environment, ecology, animal rights
- Youth work
- Professional associations
- Sports or recreation
- Women's group
- Peace movement
- Organizations concerned with health
- Consumer groups
- Other groups

Happiness & Social Capital Developed countries (15 years)



Correlation between trends

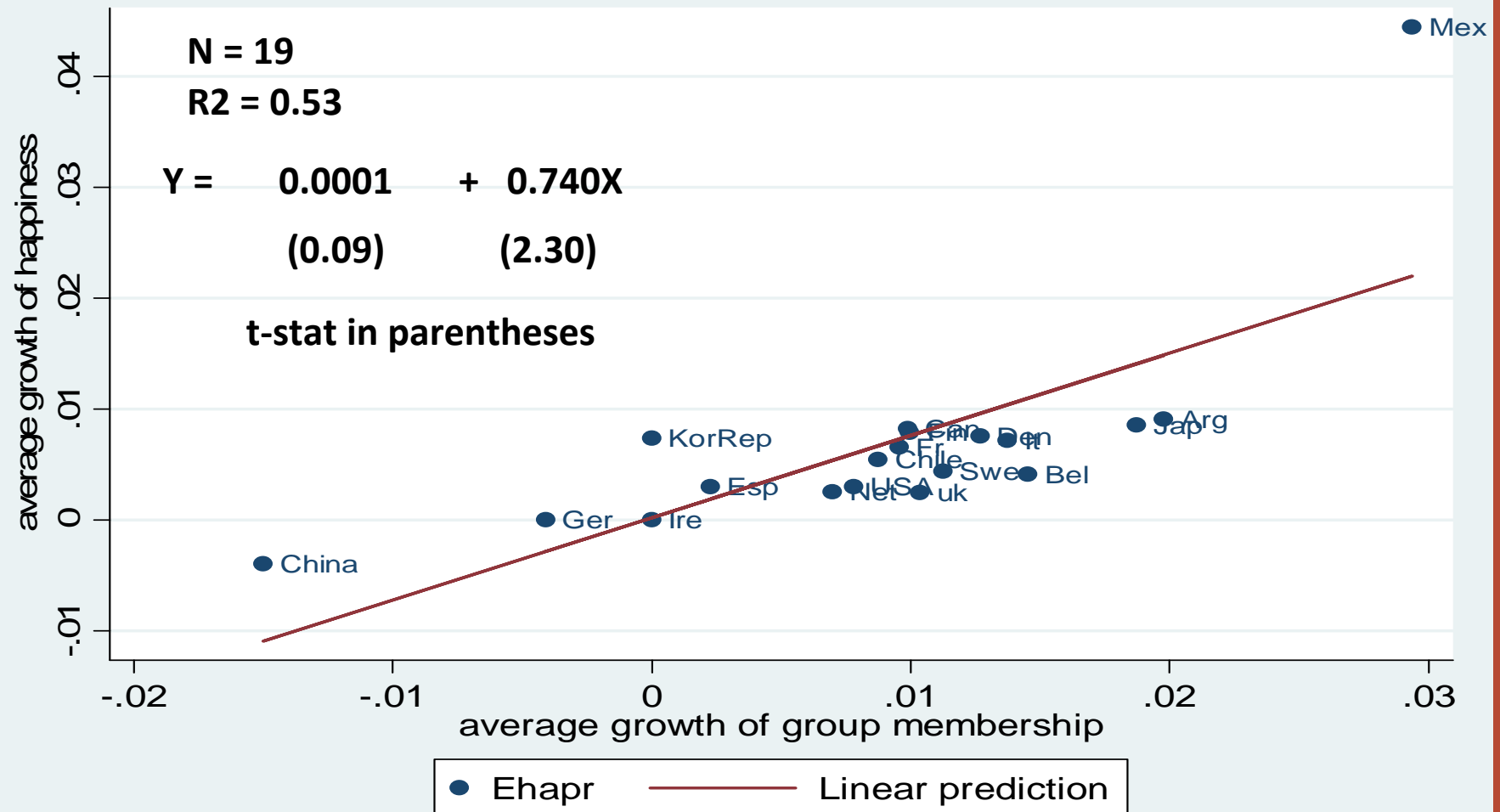
Happiness & Social Capital Developing countries (15 years)



Correlation between trends

Happiness & Social Capital

All countries (15 years)



Correlation between trends

Results

- World-wide evidence: Happiness and GDP are unrelated in the long run while happiness and sociability are strongly and positively related

Evidence from within-countries data

Can within-countries data give us a more detailed picture of what determines the changes in well-being over time ?

Declining Trend in US happiness (1975-2004): Why?

The trend of US happiness is predicted by 4 forces that drive such a trend in opposite directions (Bartolini, Bilancini and Pugno 2008, GSS data)

- Increase in income
- Social comparisons
- Decline of relational goods
- Decline of trust in institutions

Relational goods and trust in institutions:
components of social capital

Social comparisons

- Mrs. Jones compares what she owns with what is owned by other persons, said reference groups
- Having a lot may seem little to Mrs. Jones if those she compares herself to, have more
- An increase in income has a positive impact on the well-being of Mrs. Jones but an increase of the same size in the income of her reference group, offsets about $2/3$ of such an impact
- Growth raises happiness if what matters for happiness is to have a bigger car, not if what matters is to have a bigger car than your neighbour

The decline in relational goods

The trends of the various indicators document:

- An increase in: loneliness, sense of isolation, instability of families, generational cleavages, mistrust
- A decrease in: social contacts, honesty, solidarity, social participation, civic engagement

The decline of relational goods and of trust in institutions

Trends in US Social Capital (GSS, 1975-2004)

Probit (# is OLS)	Time Coeff.	Probit (# is OLS)	Time Coeff.
Married	-.030***	Other Groups	-.004**
Separated	.038***	#other Groups	-.001**
Divorced	.003		
General trust	-.015***	Confident in banks	-.024***
People unfair	.010***	Confident in companies	-.006***
People helpful	-.006***	Confident in org. religion	-.023***
Monthly with relatives	-.001	Confident in education	-.024***
Monthly with neighbors	-.015***	Confident in executive	-.007***
Monthly with friends	.006***	Confident in universities	-.010***
Monthly at bar	-.009***	Confident in press	-.045***
1-2 Putnam's Group	-.010***	Confident in medicine	-.020***
3+ Putnam's Groups	.002	Confident in television	-.030***
#Putnam's Groups	-.003**	Confident in sup. court	.0002
1 Olson's Group	-.008***	Confident in science	-.003***
2+ Olson's Groups	.004	Confident in congress	-.020***
#Olson's Groups	-.001**	Confident in military forces	.016***

The Impact of Relational Goods on Happiness

OLS Estimation	Coefficient	t-stat
Female	0.01	0.57
Age	-0.01	-3.13
Age square	0.00	3.13
Black	-0.11	-3.71
Other non-white	0.00	-0.06
% Diff, Regional price index	-0.05	-1.24
Ln household income/1000	0.07	6.01
Ln Reg-Age-Race Income/1000	-0.04	-1.77
Household size	-0.02	-2.50
Years of education	0.00	0.31
Retired	0.02	0.63
Unemployed	-0.19	-3.90
Keeping house	0.03	1.18
Student	0.07	1.28
Other	-0.11	-1.42
Parents divorced or separated	-0.02	-0.51
Living with own parents at 16	0.00	-0.05

Type of SC	OLS Estimation	Coefficient	t-stat
Non-Instrumental Relational SC	Married	0.1870	6.93
	2nd+ Marriage	0.0274	1.05
	Separated	-0.0675	-1.93
	Divorced	-0.0298	-0.55
	Widowed	-0.1106	-2.67
	Number of Children	0.0053	0.86
	Monthly with relatives	0.0440	2.73
	Monthly with neighbors	0.0392	2.34
	Monthly with friends	0.0421	2.53
	Monthly at bar	-0.0551	-2.54
	Others can be trusted	0.0137	0.77
	Others are helpful	0.0671	3.62
	Others are unfair	-0.0536	-2.65
	Member of 1 or 2 P-Groups	0.0393	2.12
Member of 3+ P-Groups	0.1011	4.29	
Purely Instrumental Relational SC	Member of 1 O-Group	0.0133	0.70
	Member of 2+ O-Groups	-0.0485	-1.69

The Impact of Trust in Institutions on Happiness

Type of SC	OLS Estimation	Coefficient	t-stat
Non-Relational SC	Very confident in banks	0.0777	3.74
	Very confident in companies	0.0937	4.68
	Very confident in org. religion	0.0158	0.82
	Very confident in education	0.0758	4.01
	Very confident in executive	0.0529	2.19
	Very confident in org. labor	0.0439	1.49
	Very confident in press	-0.0120	-0.55
	Very confident in medicine	0.0039	0.22
	Very confident in television	0.0058	0.23
	Very confident in supreme court	0.0048	0.26
	Very confident in scientific	-0.0055	-0.31
	Very confident in congress	0.0088	0.33
	Very confident in military forces	0.0116	0.62
	Year Dummies	YES	

Accounting for the Happiness Trend

I showed that SC is **DECLINING** and **BENEFICIAL**

Next step: to compute the impact of each variable over the period 1975-2004, i.e.

$$\Delta h = \alpha(X_{2004} - X_{1975})$$

α is the vector of coefficients, X_{2004} and X_{1975} are vectors containing average values of regressors in year 2004 and 1975

Accounting for the Happiness Trend

Disaggregation of Happiness Variation in 1975-2004

Groups of Regressors	Impact on h	Partial Sums	Type of SC
Demographics	-0.0075	-0.0075	
Absolute Income	0.0910		
Relative Income	-0.0620	0.0290	Income
Other Socio-economics	0.0135	0.0350	All non-SC
Marital Status & Children	-0.0309		
Social Contacts	-0.0003		
Trust in Individuals	-0.0091		Non-Instr.
Putnam's Group	-0.0025	-0.0428	RSC
Olson's Group	-0.0006	-0.0434	RSC
Confidence in institutions	-0.0061	-0.0495	All SC
Predicted variation	-0.0145		
Observed Variation	-0.0192		

Predictors of the decline in US happiness

The predicted negative impact of:

- Social comparisons
- Decline of relational goods
- Decline of trust in institutions

more than offset the predicted positive impact of the increase in income

Relational goods matter

- If relational goods had remained at its 1975 level, happiness might have substantially increased

About 10% !

This is the growth rate of household income needed to compensate for the happiness loss due to the decline in relational measures

- Given the relational decay, not even 30 years of economic growth at a Chinese pace would have increased the US happiness



Lessons for measuring well-being

- The purchasing power, measured by GDP, is one component of well-being but is not all that matters

- The quality of relational experience cannot be purchased but is important for well-being

- A credible indicator of well-being must also take into account social capital

Moreover: US work hours increased in the last decades

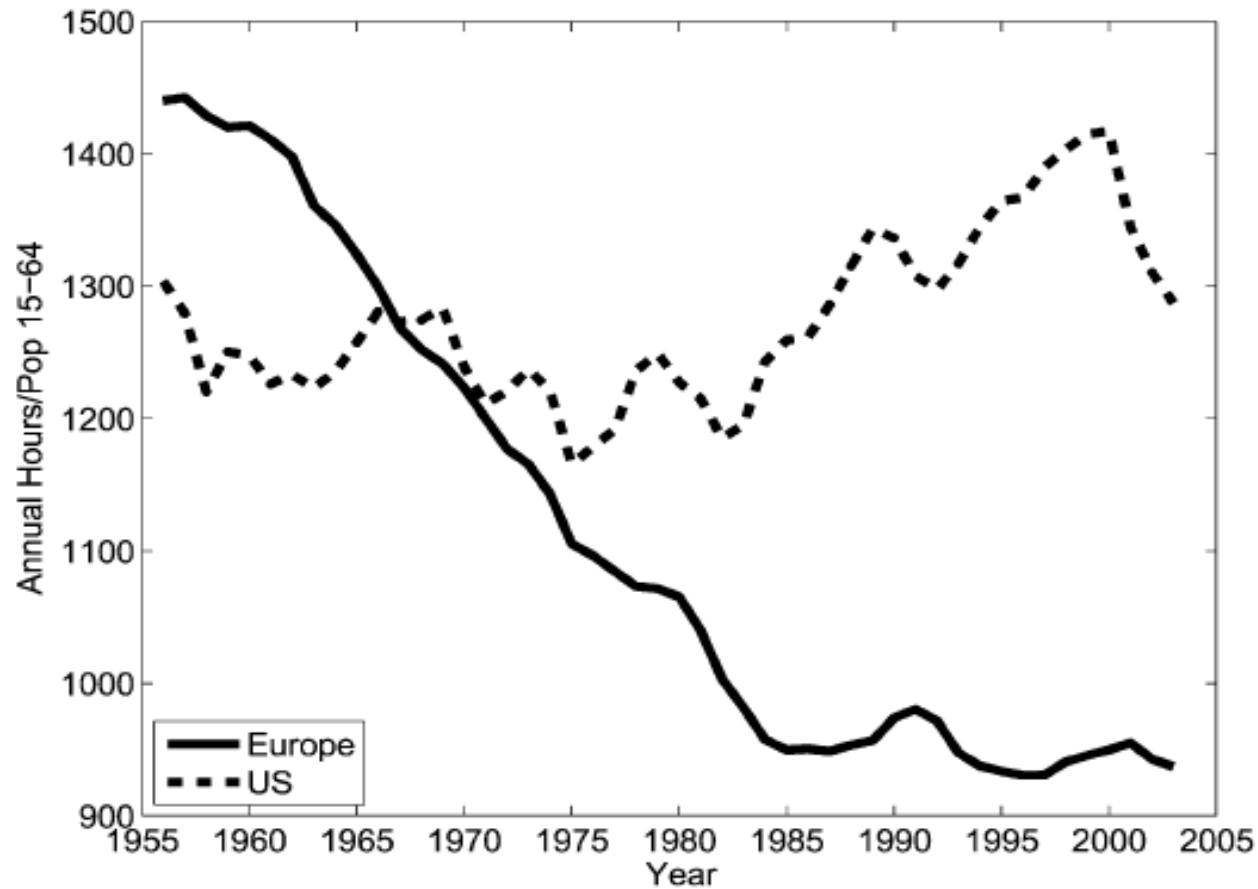
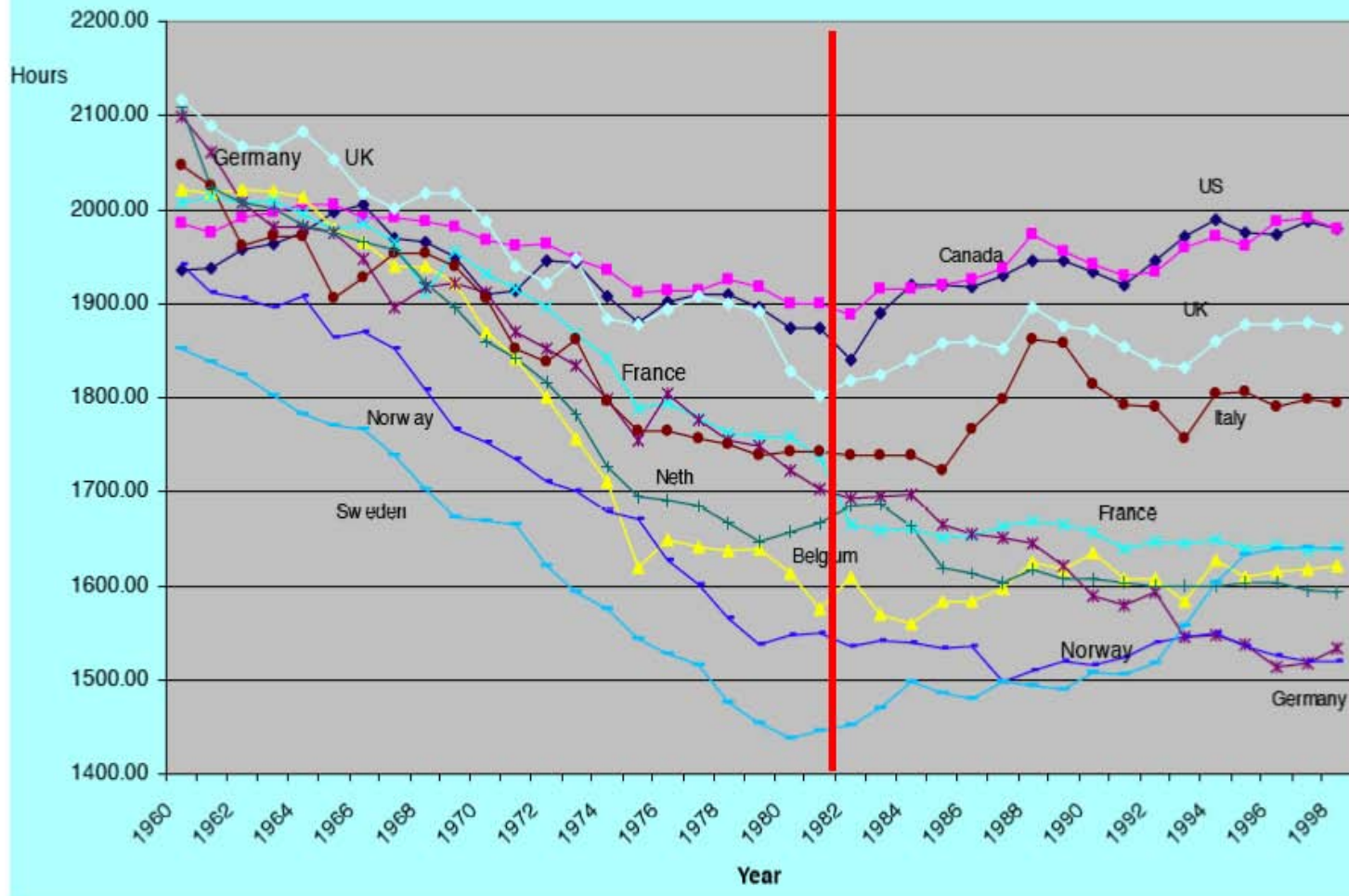


FIG. 1.—Aggregate hours in the United States and Europe

Figure 1: Average Annual Work Hours of Manufacturing Employees

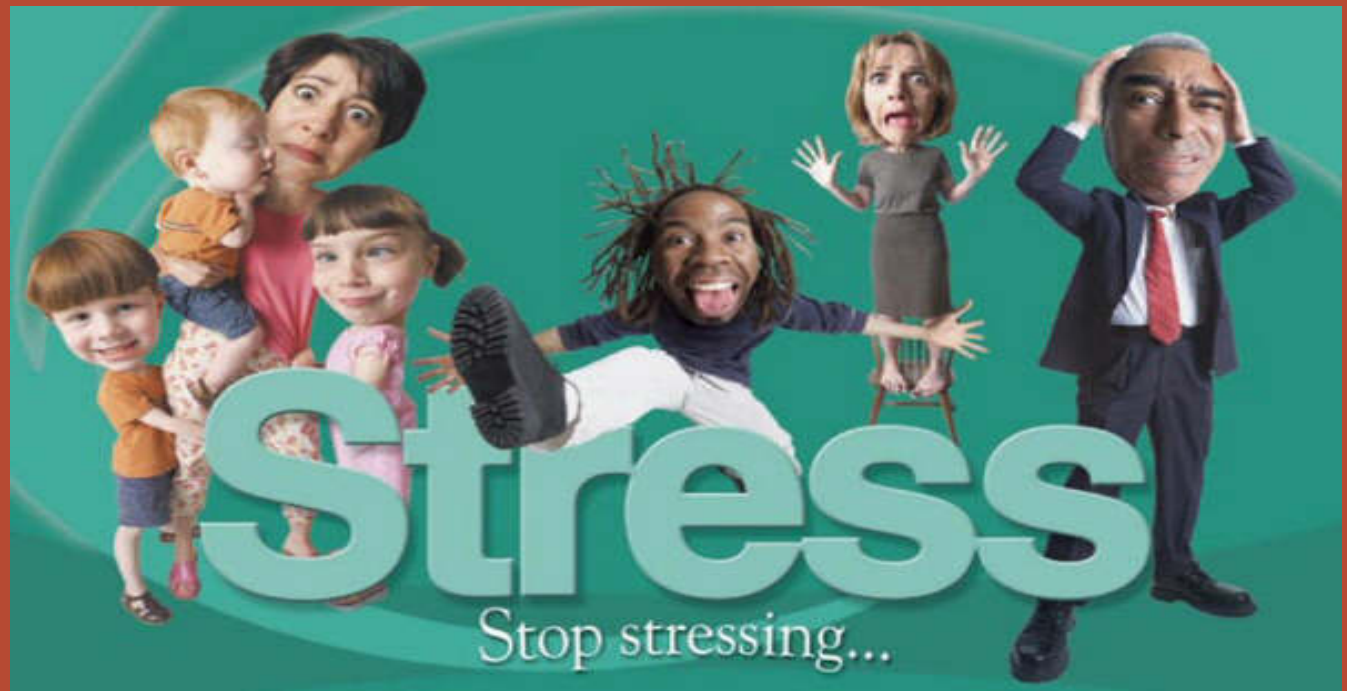


Source: Bowles and Park (2005)

Why did the US hours worked increased?

- Hours worked increased in the US in the last 30 years while they decreased in most EU countries

- Currently Americans work more than Europeans. They work longer hours and their holidays are shorter. Until the '60s it was the opposite.



The Easterlin paradox becomes more paradoxical

- Why do Americans work more if more money does not make them happier?

Question 2.

Why do Americans work more?

Bartolini and Bilancini (2009, GSS data, 1975-2004) show that:

- Being poor in relational goods causes longer work hours
- The reason is that individuals turn to work and money to compensate for poor relational conditions
- Those poor in time develop poor relations
- This is a vicious circle. Relational poverty causes time poverty and the latter causes relational poverty

Why do Americans work more? An answer

- The increase in hours worked in the past 30 years has been influenced by the decline of relational goods. In turn, these latter has been influenced by the increase in hours worked

First conclusion:
Why Americans work more if more
money does not buy them more
happiness

- The decline of relational goods played a role in the decline of the average American's happiness and in the increase of her hours worked

Social poverty vs. economic prosperity ?

- The average American is increasingly poor in relations, time, trust in institutions and well-being. These data are the symptom of a social crisis
- However the growth rate of US GDP has been the highest in 1980-2000 among the big western countries (UK excluded)

Relational poverty as a cause of economic growth

The Negative Endogenous Growth (NEG)

(Bartolini and Bonatti JE 2003 and JEBO 2008)

We can defend ourselves from the deterioration of relational and environmental goods by purchasing some goods

To finance these defensive expenditures we must work and produce more. That is to say, we must increase the GDP

Economic growth, however, may cause the deterioration of relational and environmental goods

NEG is a vicious circle: environmental and relational deterioration fuel economic growth which in turn feeds deterioration

NEG is undesirable from the viewpoint of well-being. Private wealth is fueled by the deterioration of the common goods.

NEG: the key equations

NEG models insert some key equations in traditional endogenous (or exogenous) growth models

- $U_t = U(X_t, C_{2t}, L_t)$, $U_X > 0$, $U_C > 0$, $U_L > 0$
- $X_t = R_t + \delta C_{1t}$, $\delta > 0$

The resource R_t is subject to negative externalities

$$R_{t+1} = F(Y_t, R_t) \quad F_Y < 0, F_R > 0$$

R: Common

C_1 : Defensive expenditure: substitutes for the common

C_2 : Part of consumption aimed at satisfying other needs: does not substitute for the common

L: Leisure

Y: aggregate output



Private
wealth





Common
poverty



NEG models predict:

- The worse is the trend of relational goods
- The higher will be the growth rate of GDP
- The worse will be the trend of hours worked
- The worse will be the trend of well-being

Do NEG processes matter?

Some international comparisons

GDP growth rates 1980-2000

Country	Gdp % growth 1980-2000	Gdp annual average % growth 1980- 2000
United States	53,5368	2,549
United Kingdom	60,6247	2,886
Italy	47,1403	2,244
France	39,9541	1,902
Germany	47,6756	2,270
Netherlands	52,8461	2,516
Sweden	41,8359	1,992
Denmark	52,1377	2,482

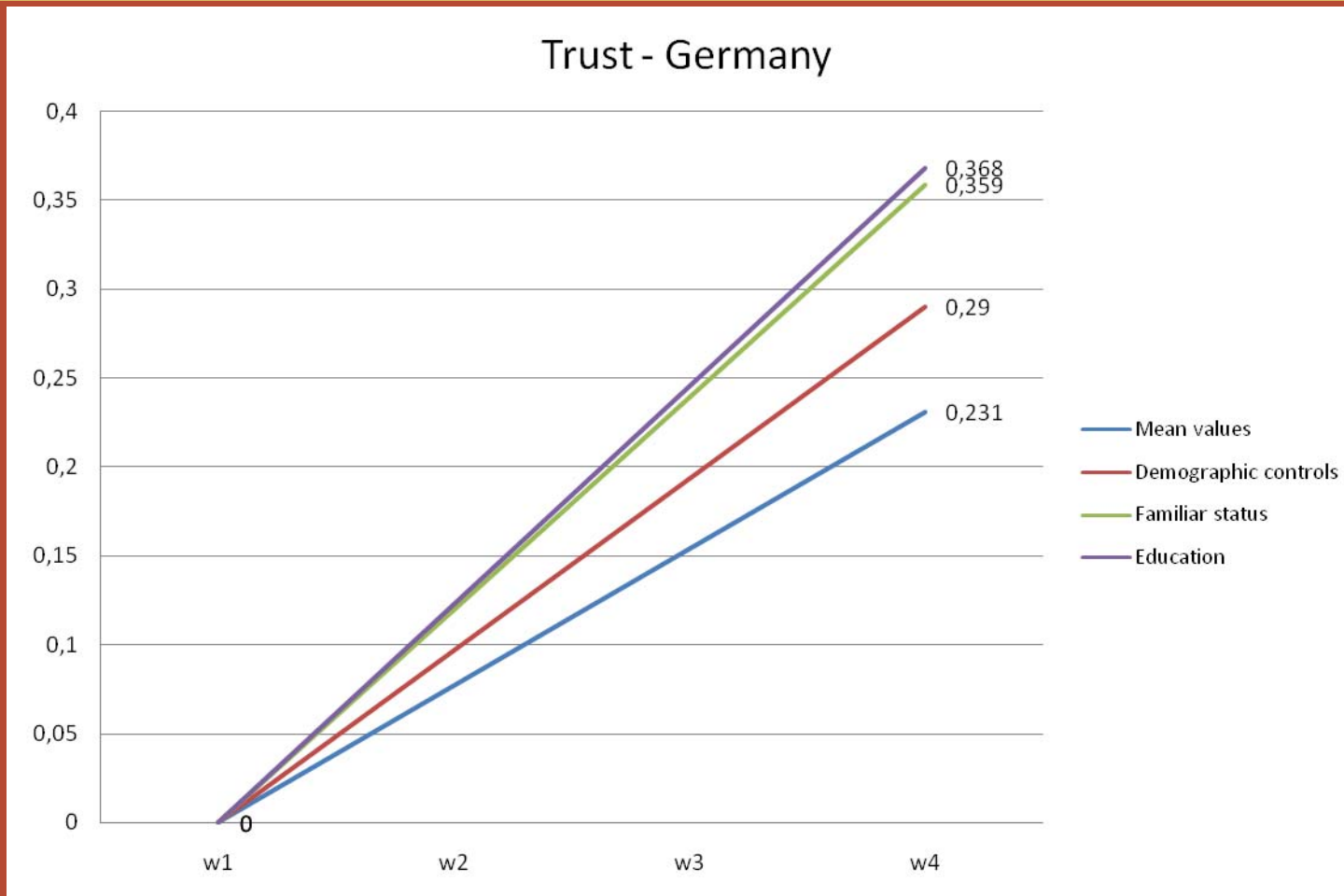
Does the NEG process matter in US growth?

*Summarizing: USA (and UK) compared to continental
Europe exhibit:*

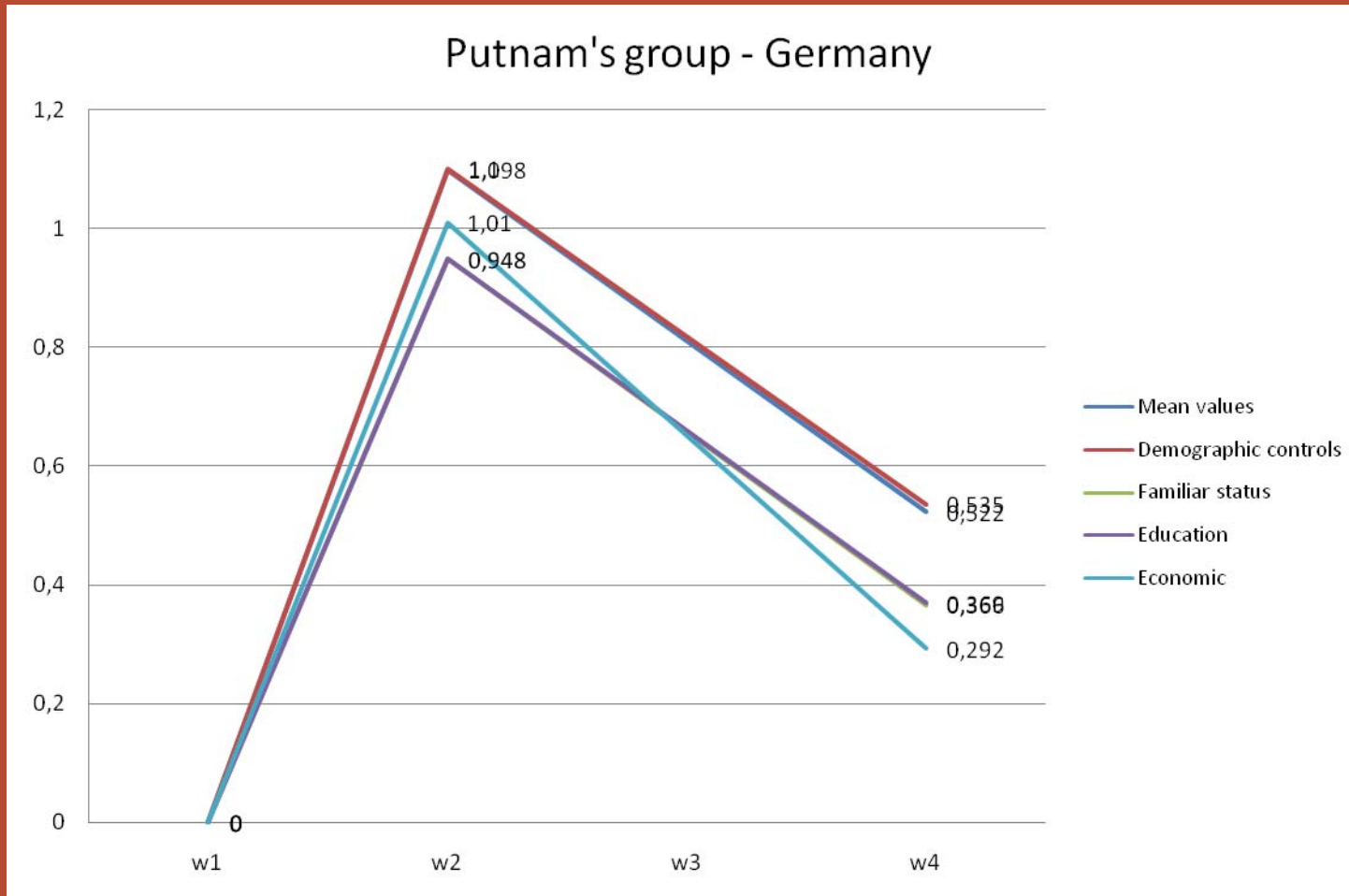
- More economic growth
- Increasing vs. decreasing hours worked
- What happened to happiness and relational goods in Europe?

Sarracino (JSE 2009) provides an answer (WVS data)

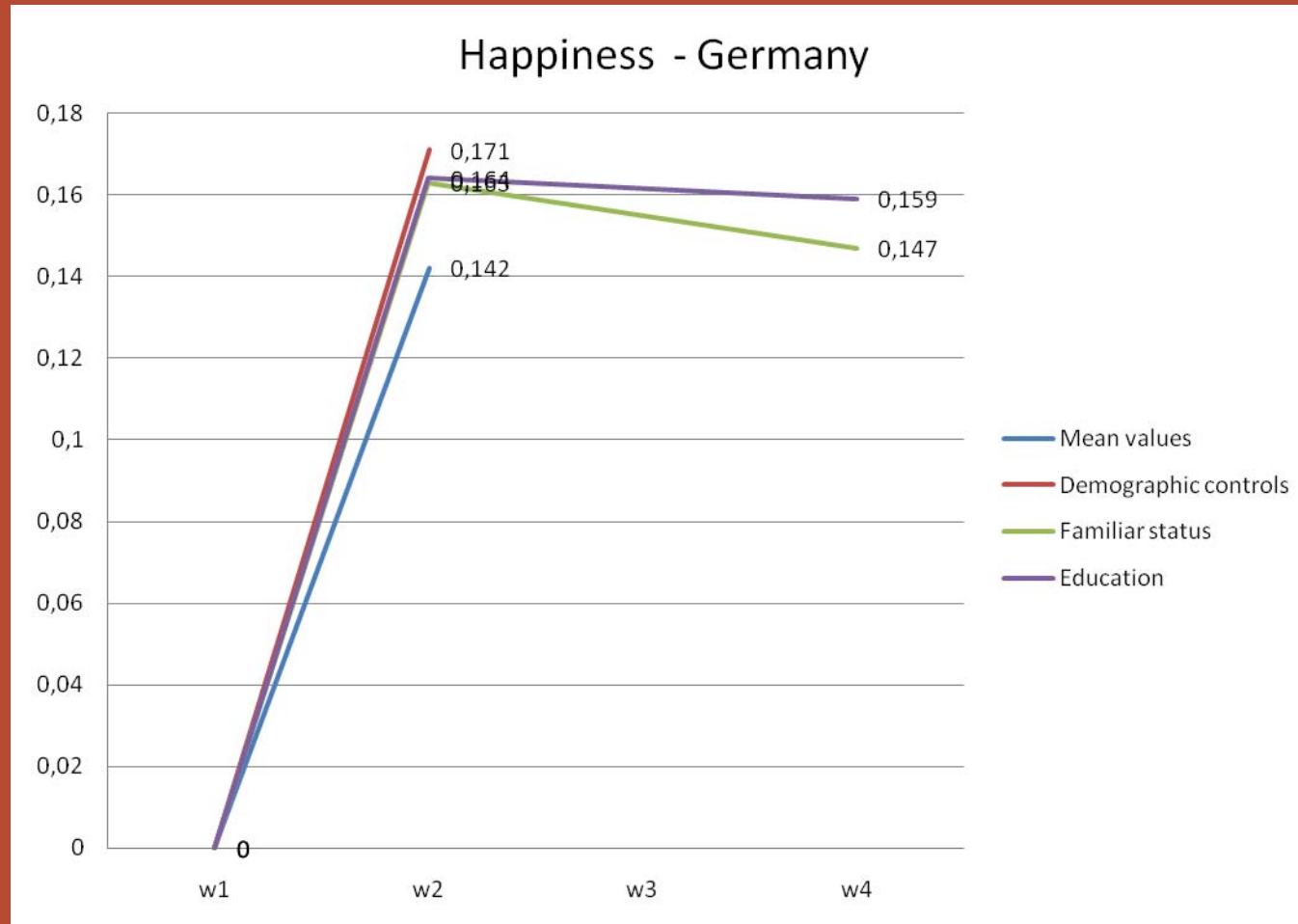
Trends of relational goods 1980-2000 (Sarracino 2008, WVS data)



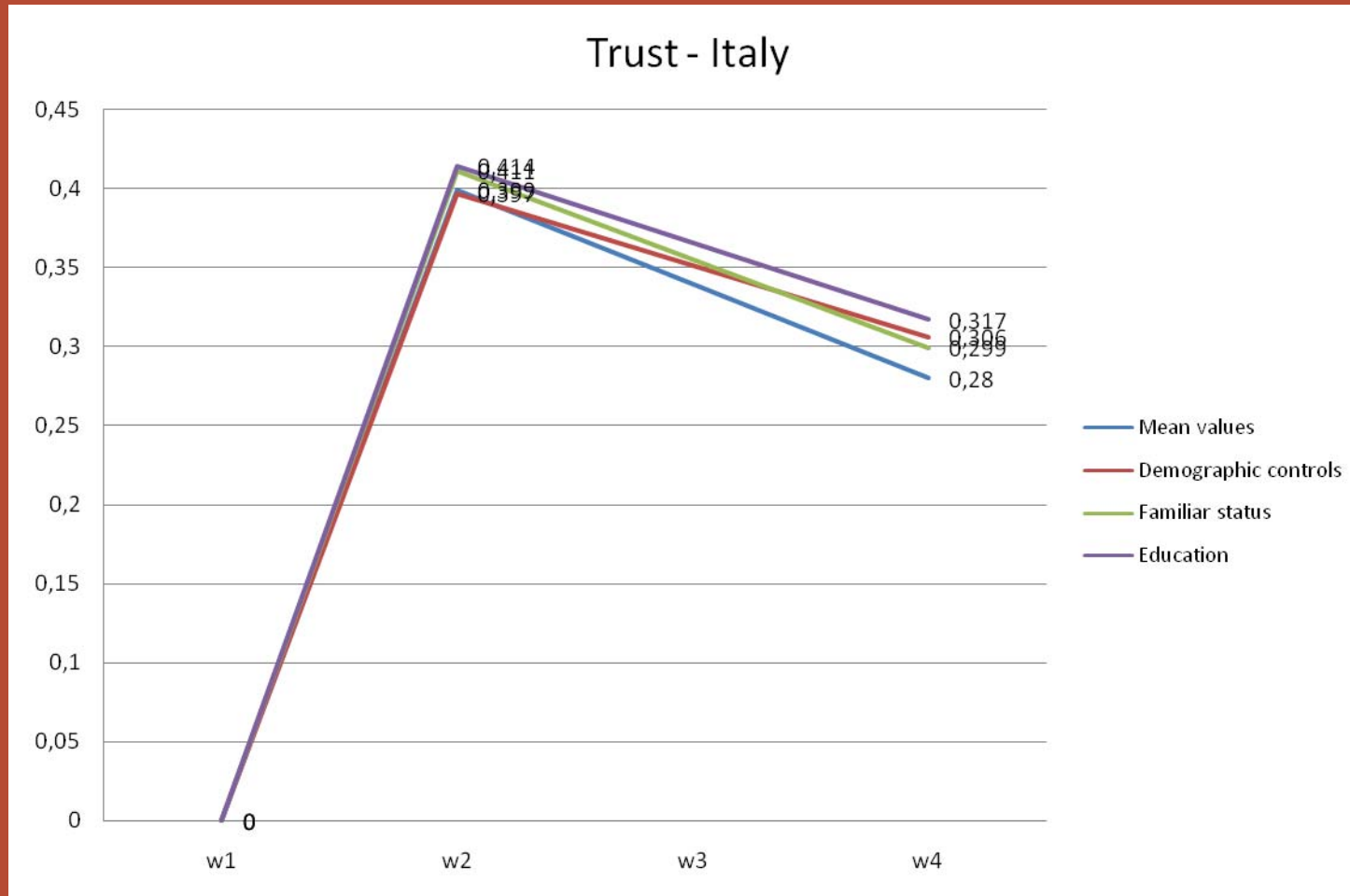
Trends of relational goods 1980-2000



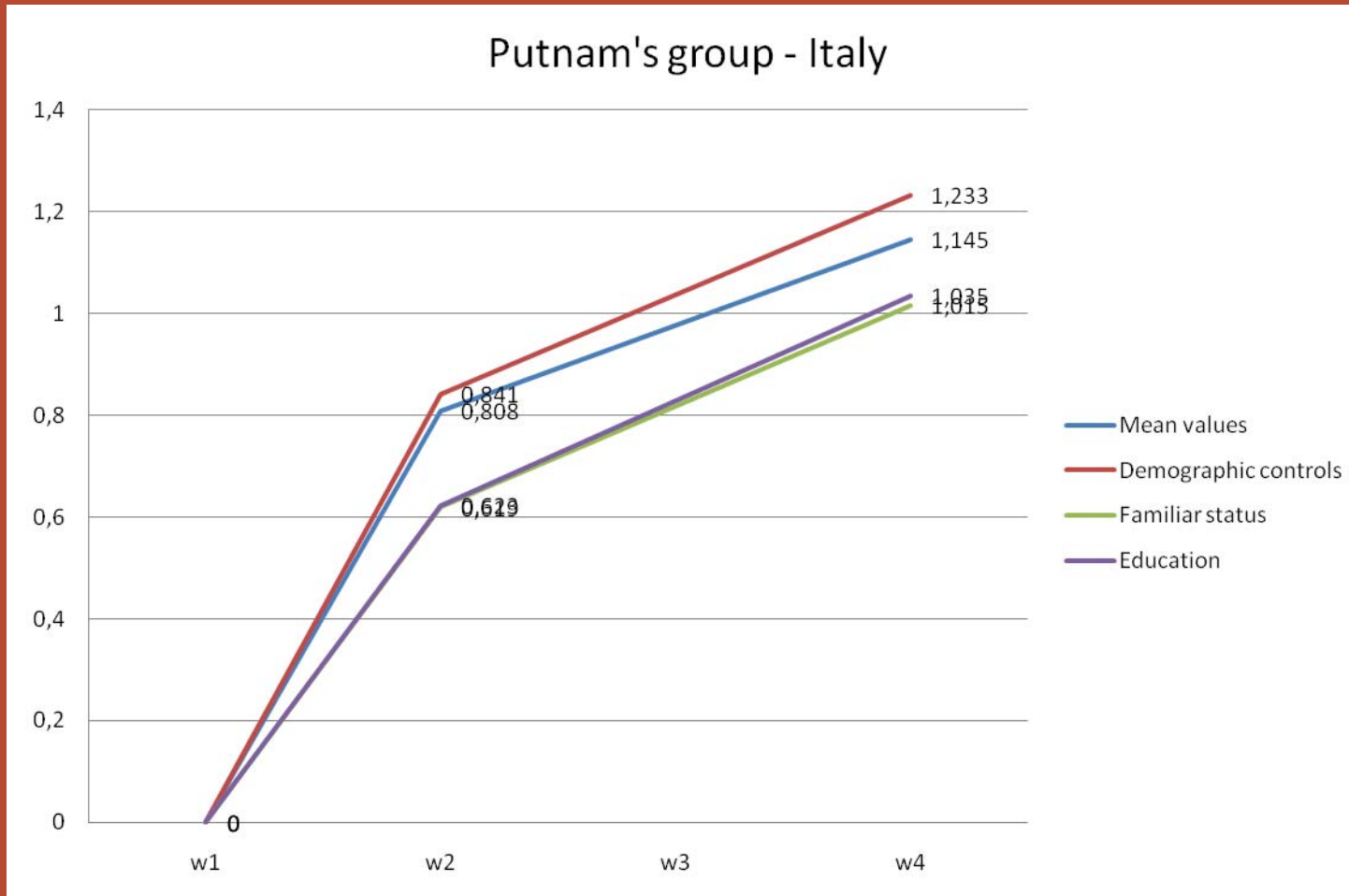
Happiness trends 1980-2000



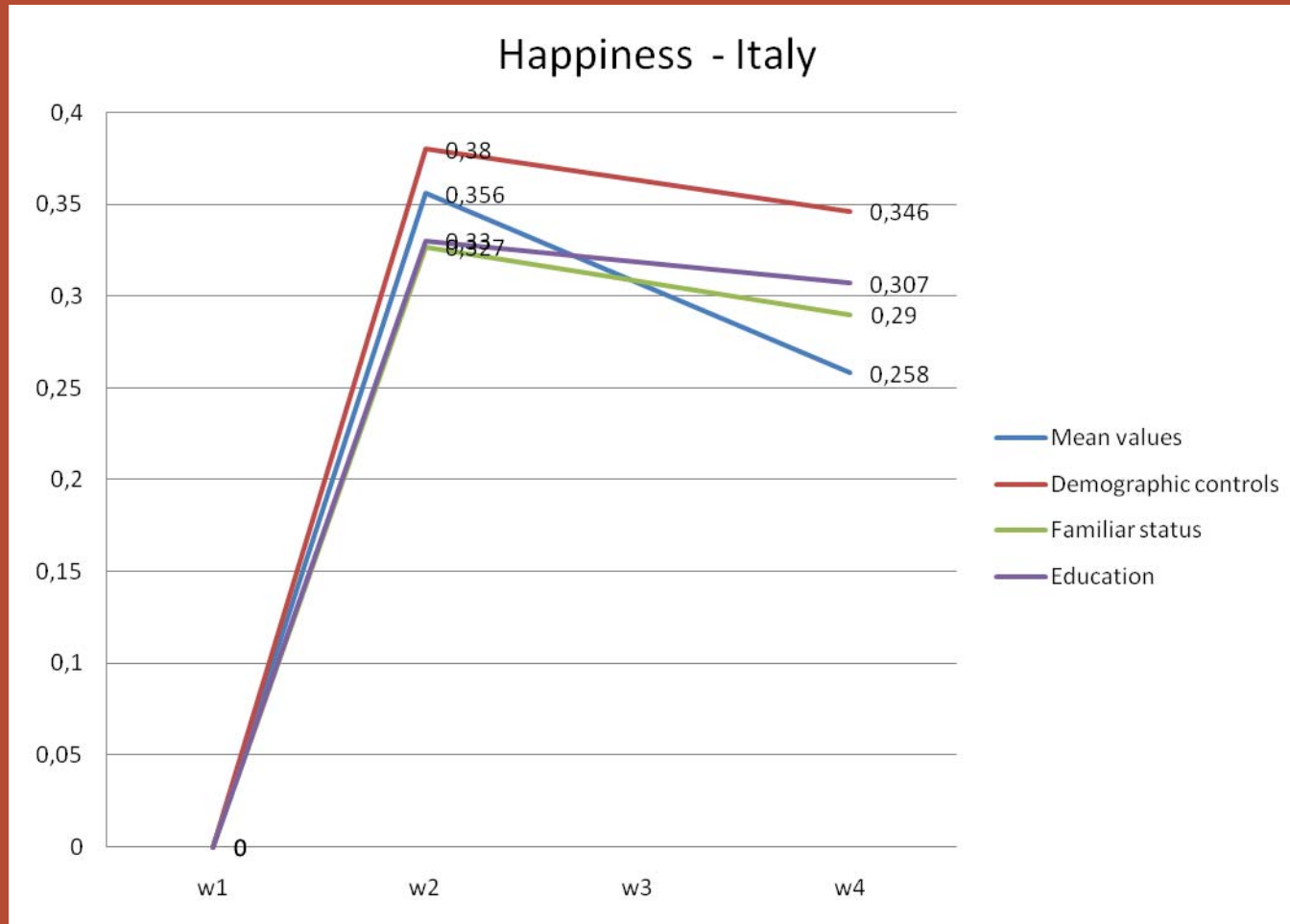
Trends of relational goods 1980-2000



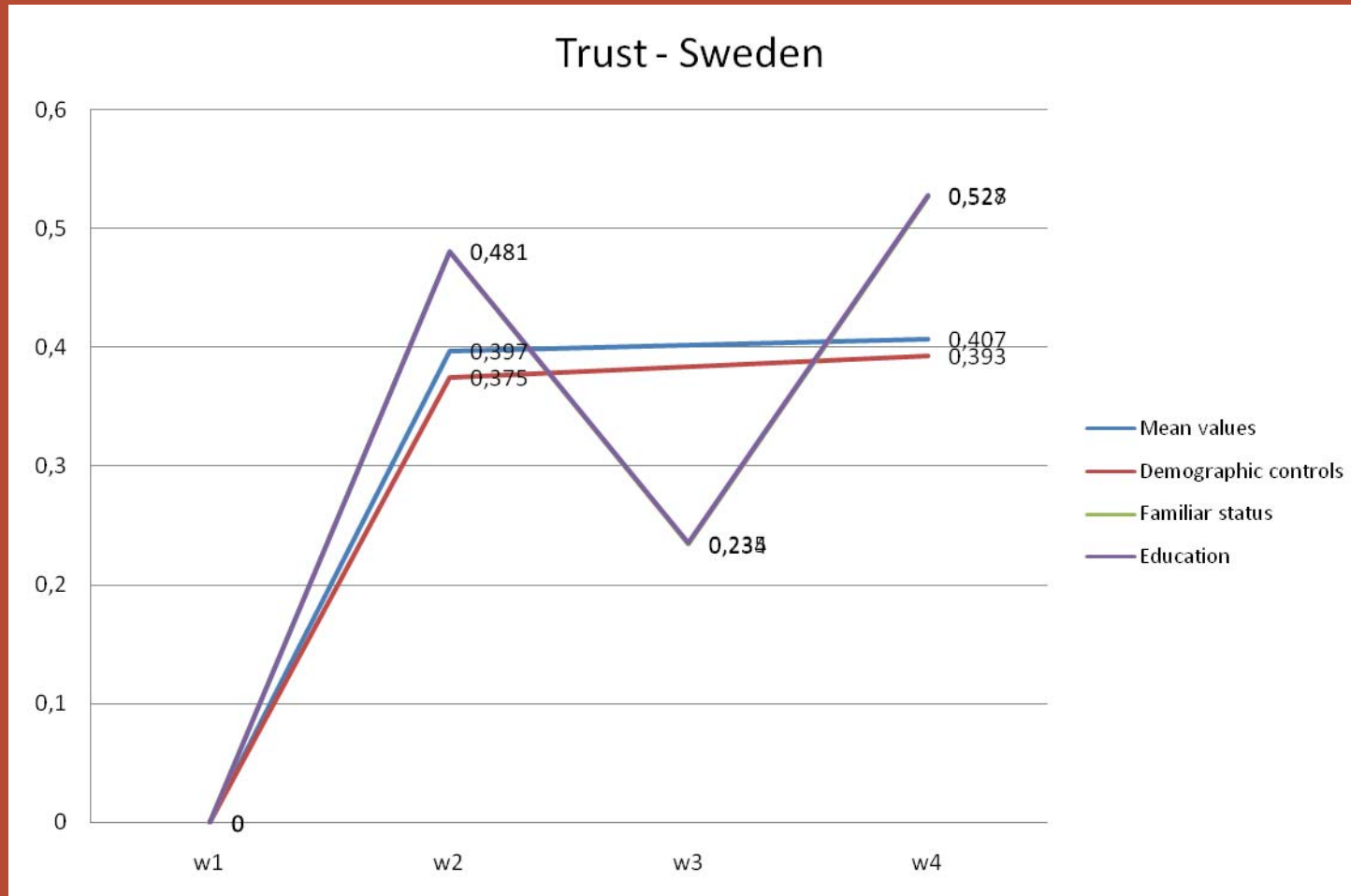
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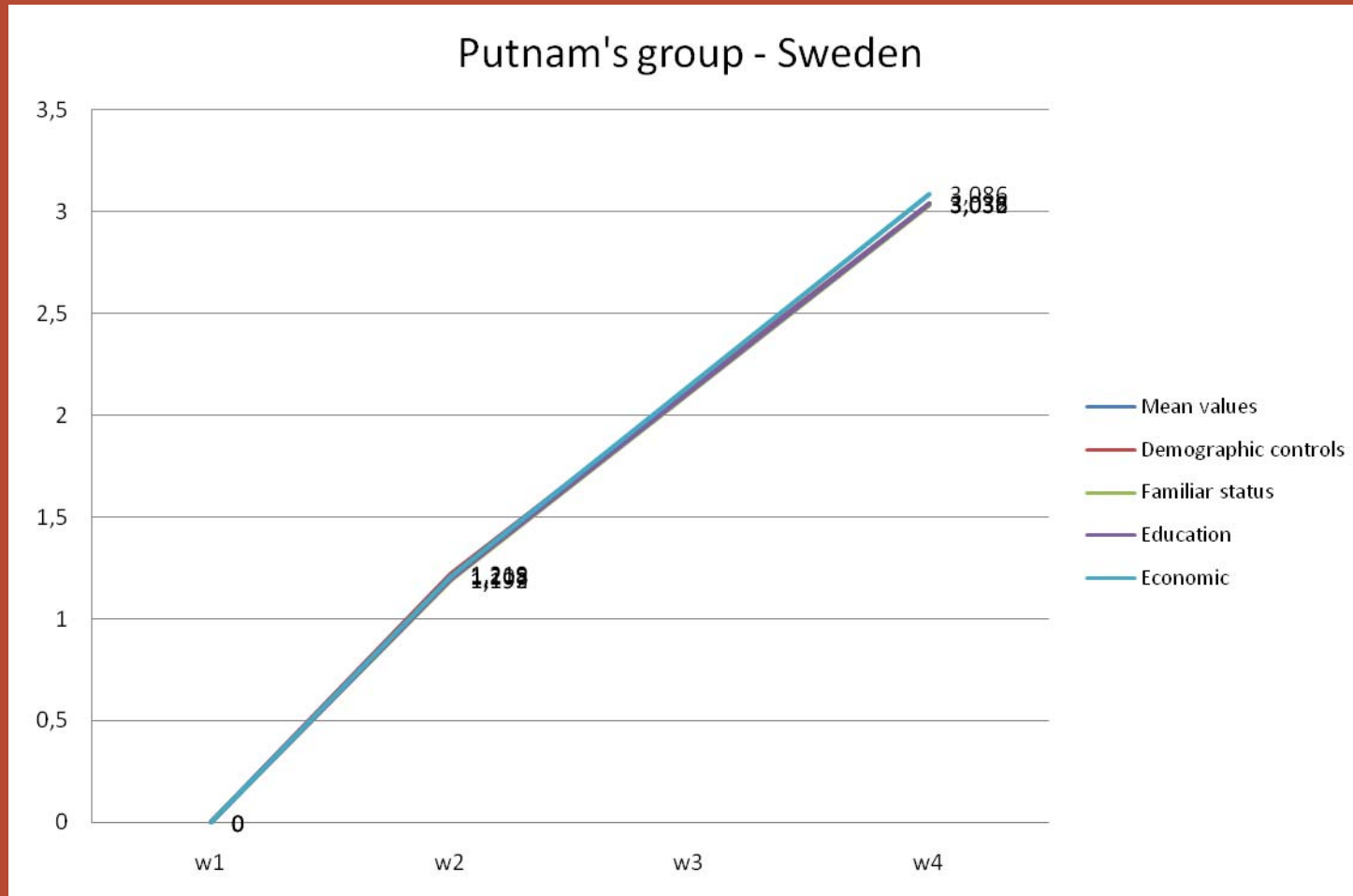
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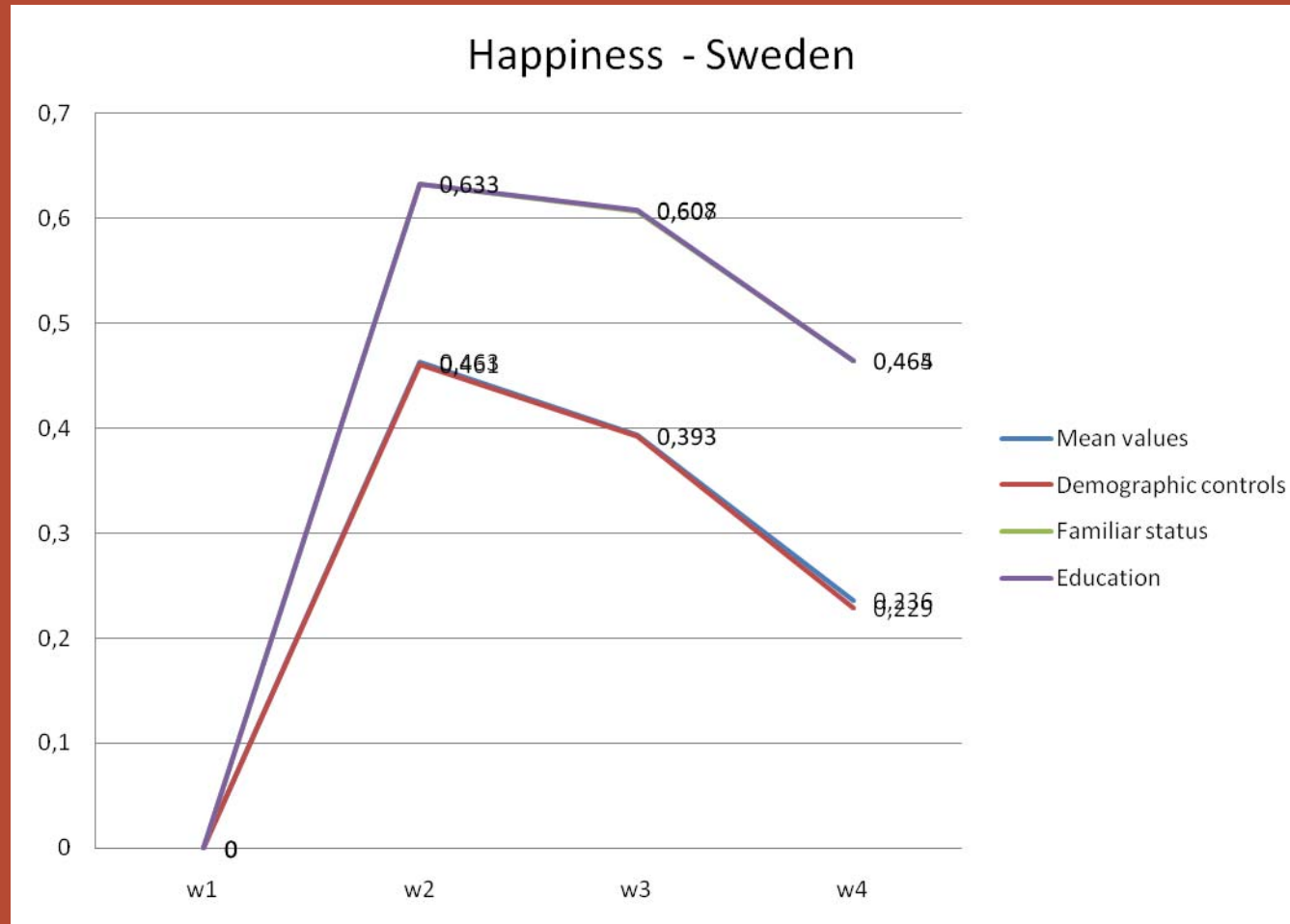
Trends of relational goods 1980-2000



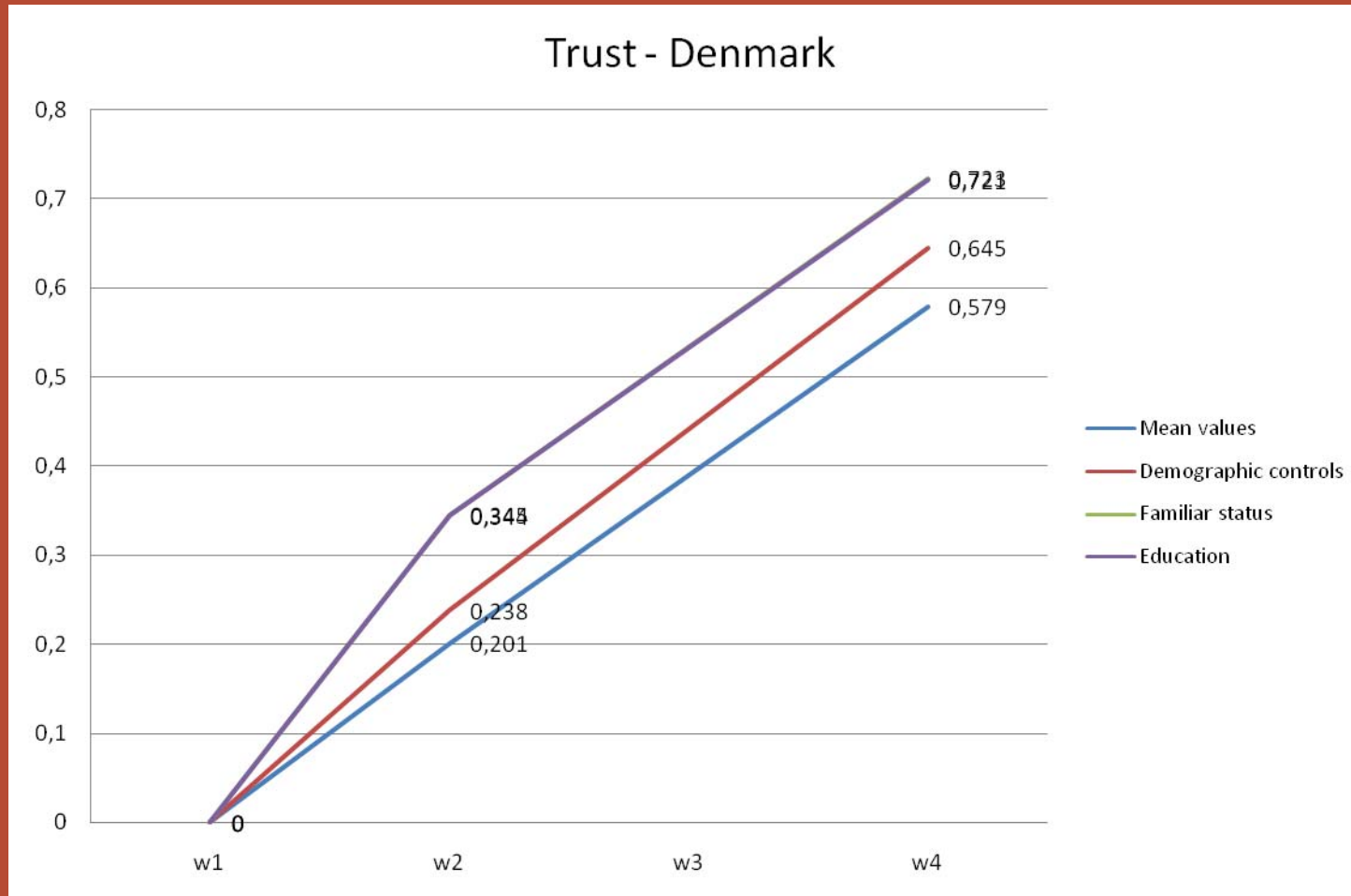
Trends of relational goods 1980-2000



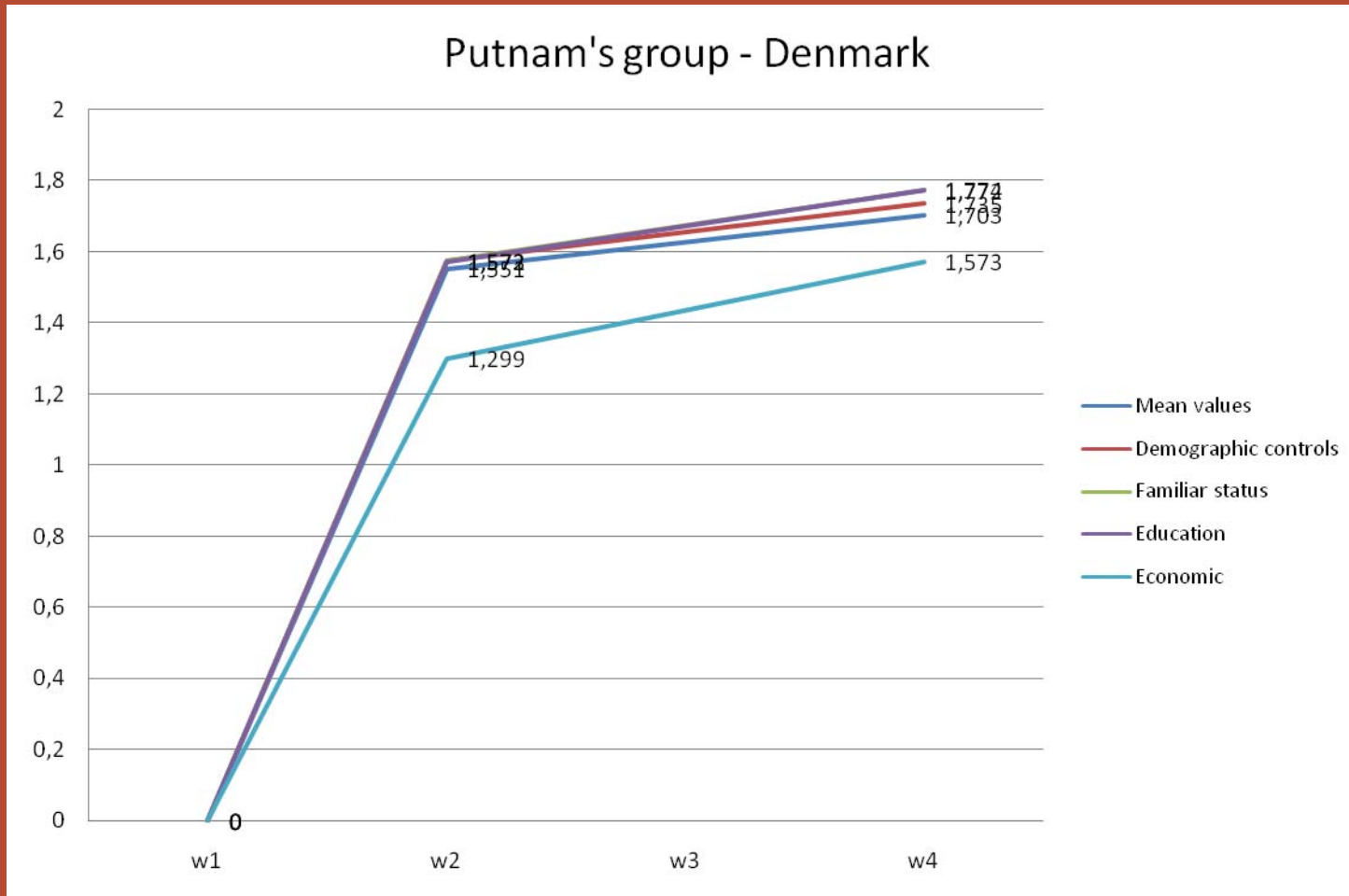
Happiness trends 1980-2000



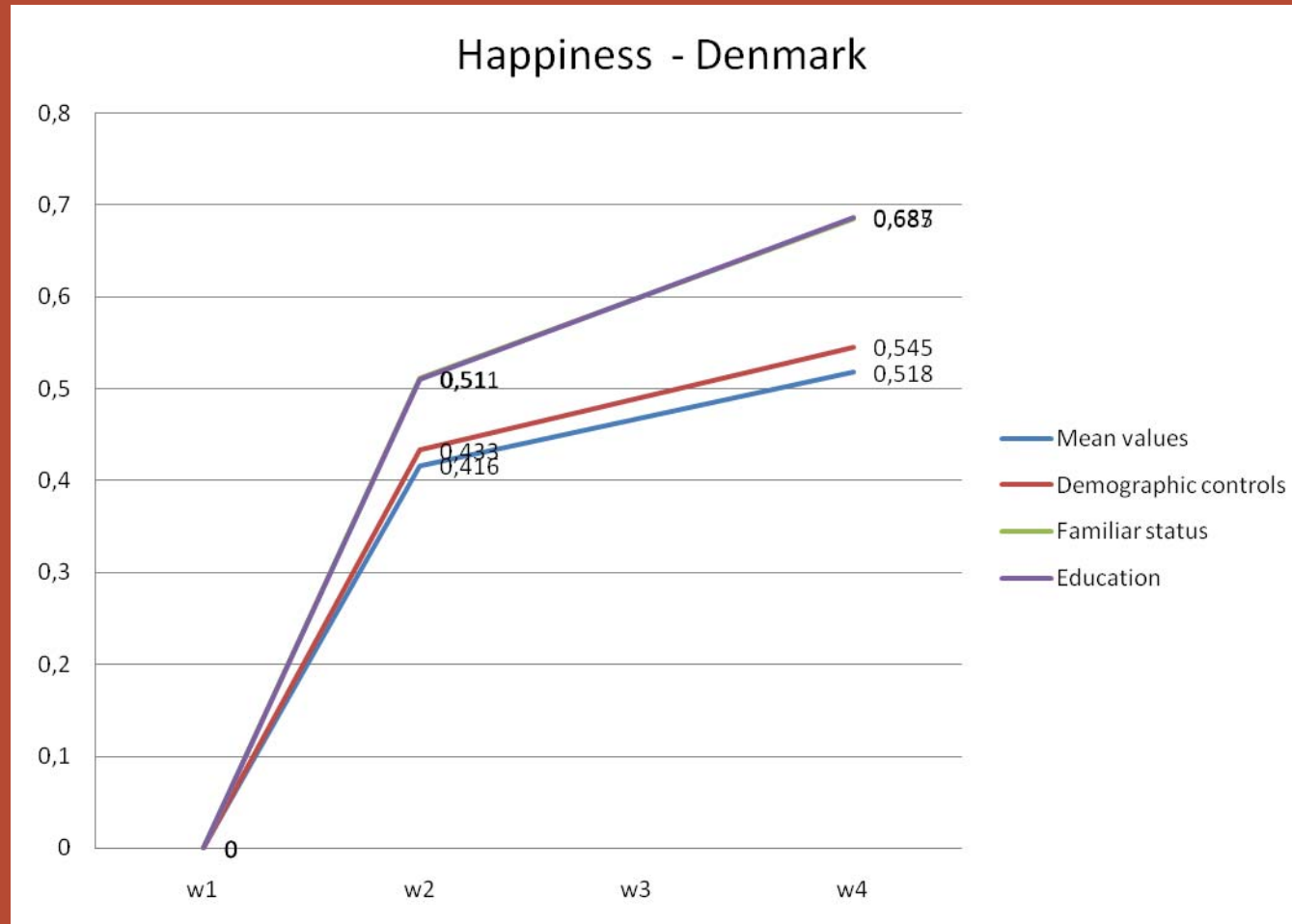
Trends of relational goods 1980-2000



Trends of relational goods 1980-2000



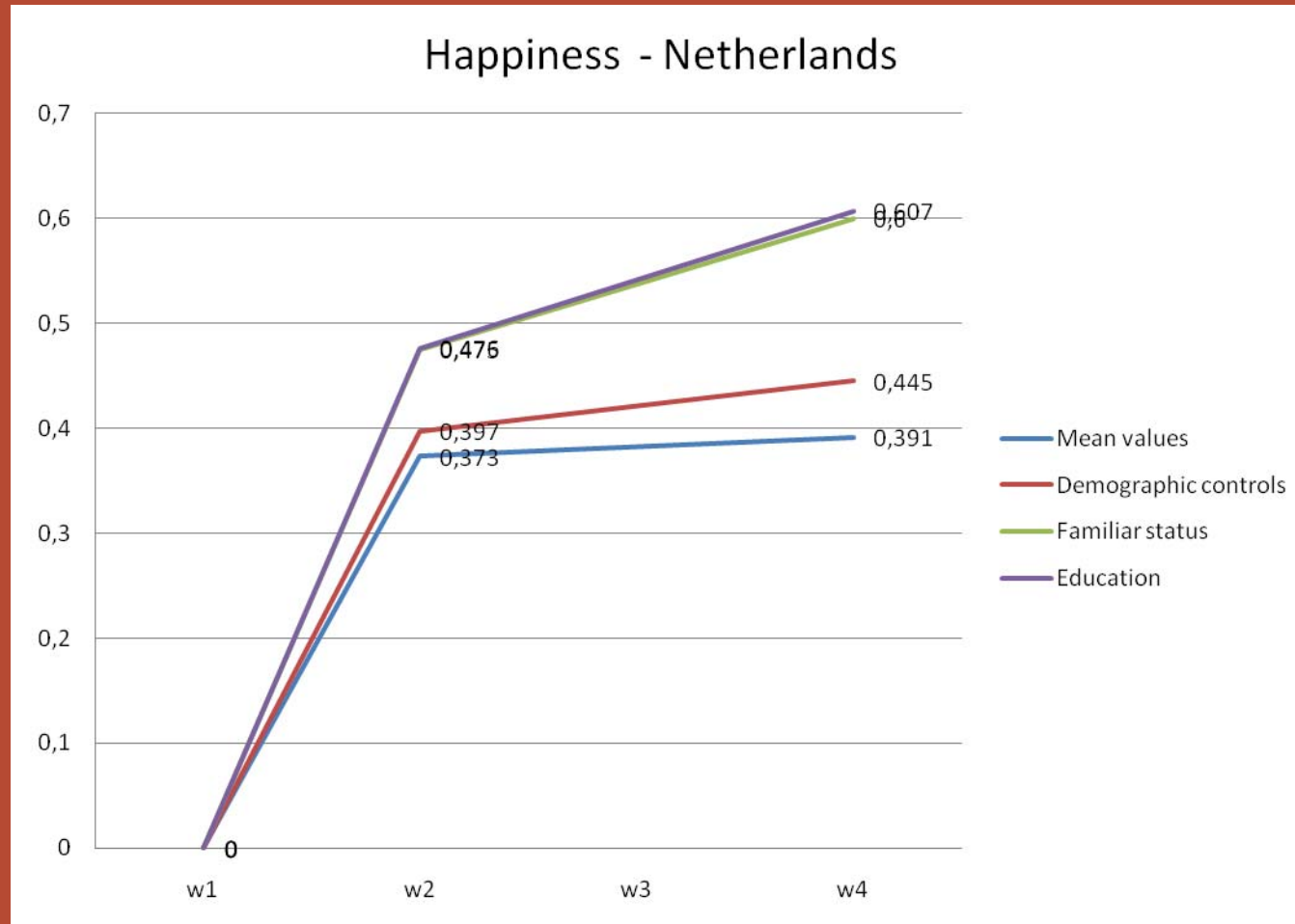
Happiness trends 1980-2000



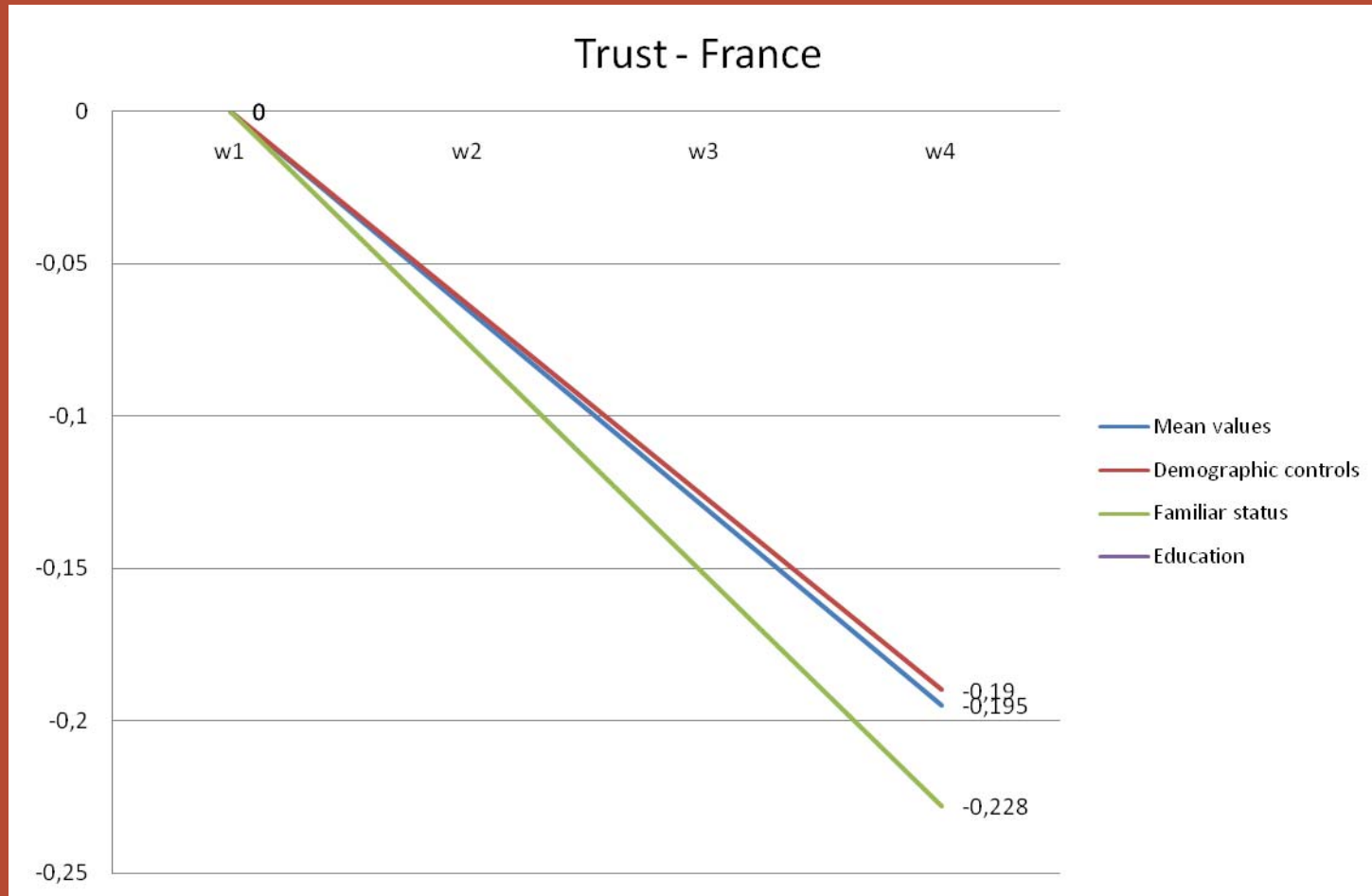
Trends of relational goods 1980-2000



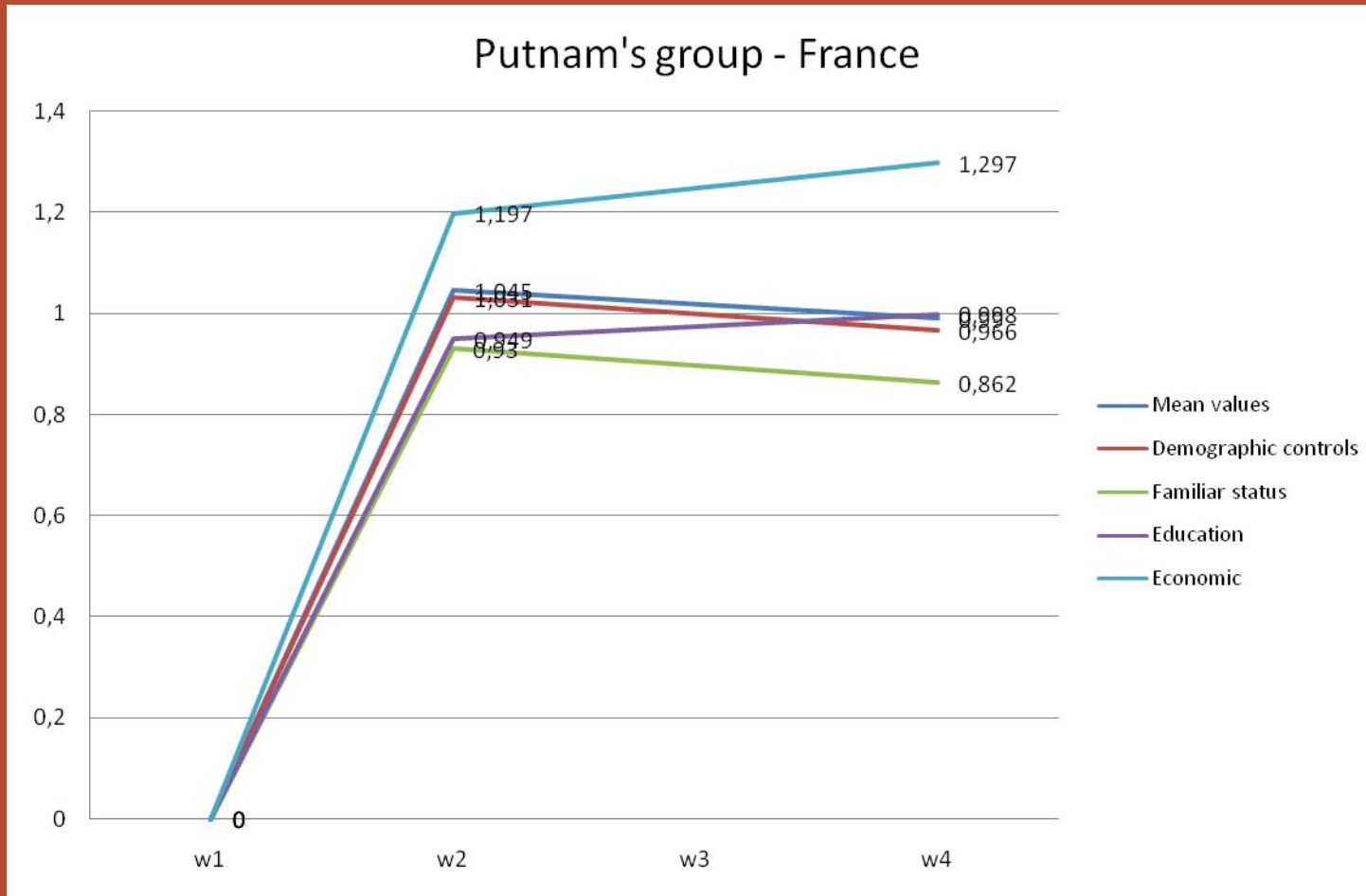
Happiness trends 1980-2000



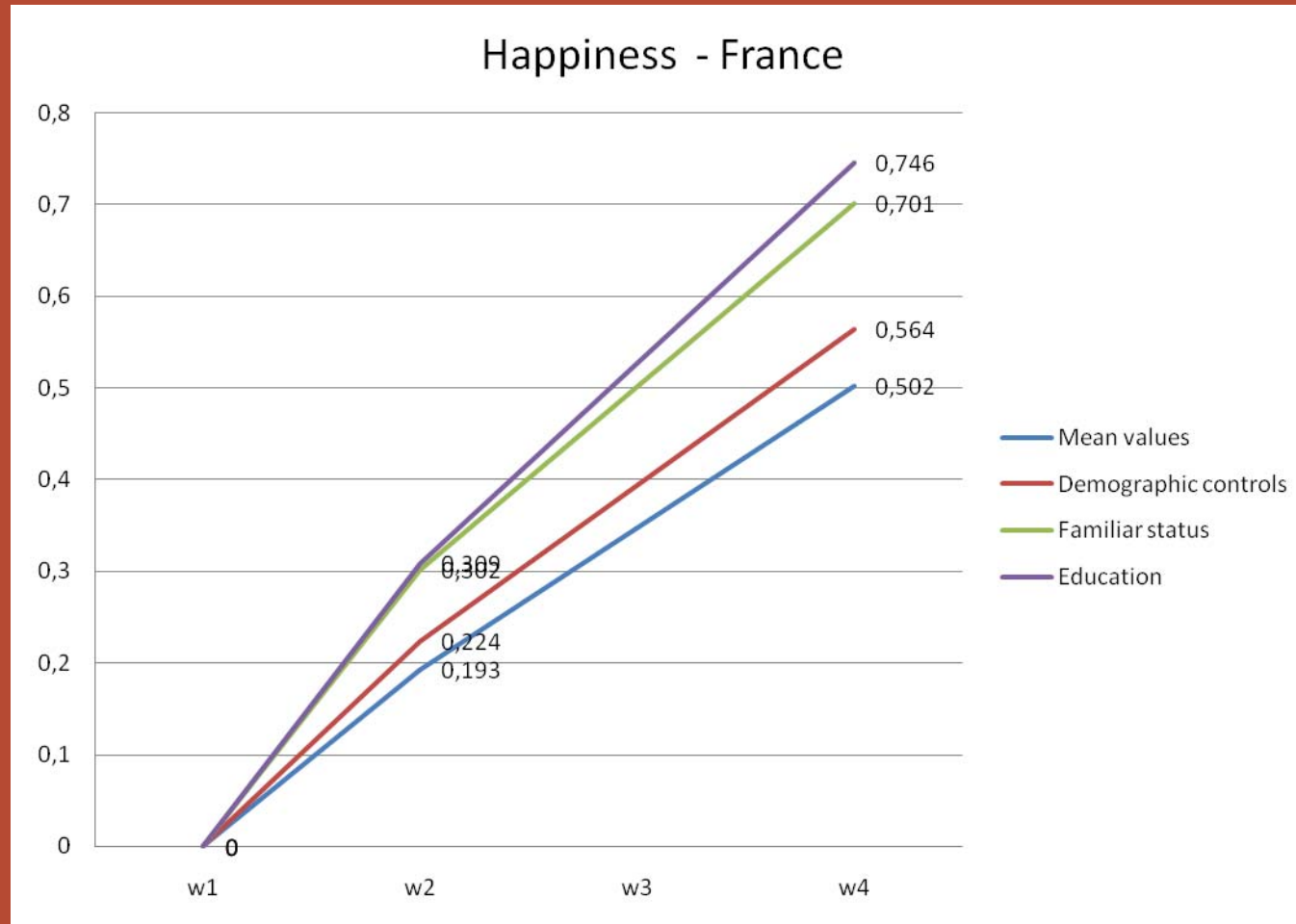
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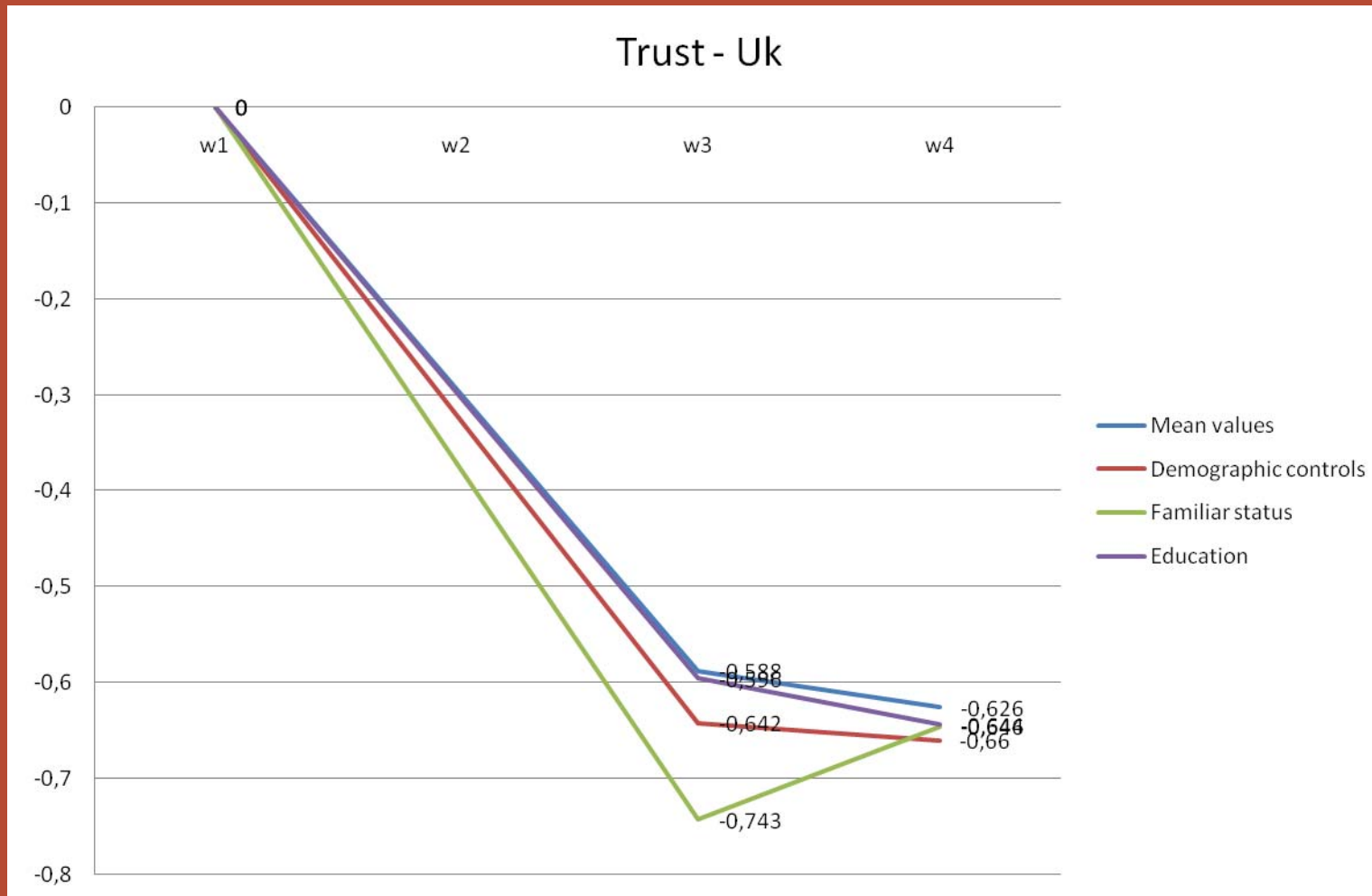
Trends of relational goods 1980-2000



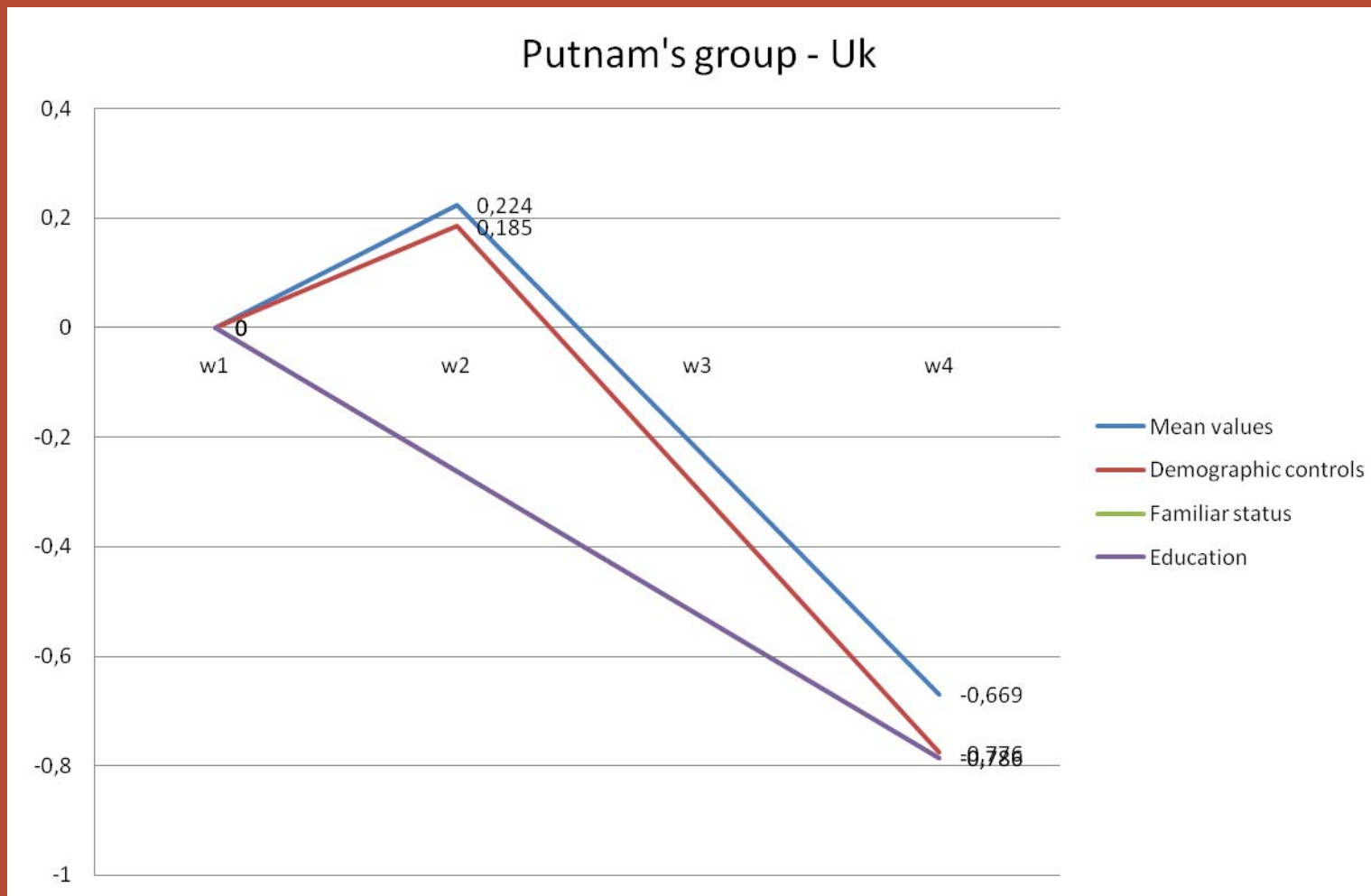
Happiness trends 1980-2000



Trends of relational goods 1980-2000



Trends of relational goods 1980-2000



Happiness trends 1980-2000



Does the NEG process matter in US growth?

Summarizing: the US (and UK) compared to continental Europe exhibit:

- More economic growth
- Increasing vs. decreasing hours worked
- Decreasing vs. increasing relational goods
- Decreasing vs. increasing happiness

Conclusion: this picture is consistent with NEG

Prudence: only descriptive statistics, scarcity of comparable data on relational goods

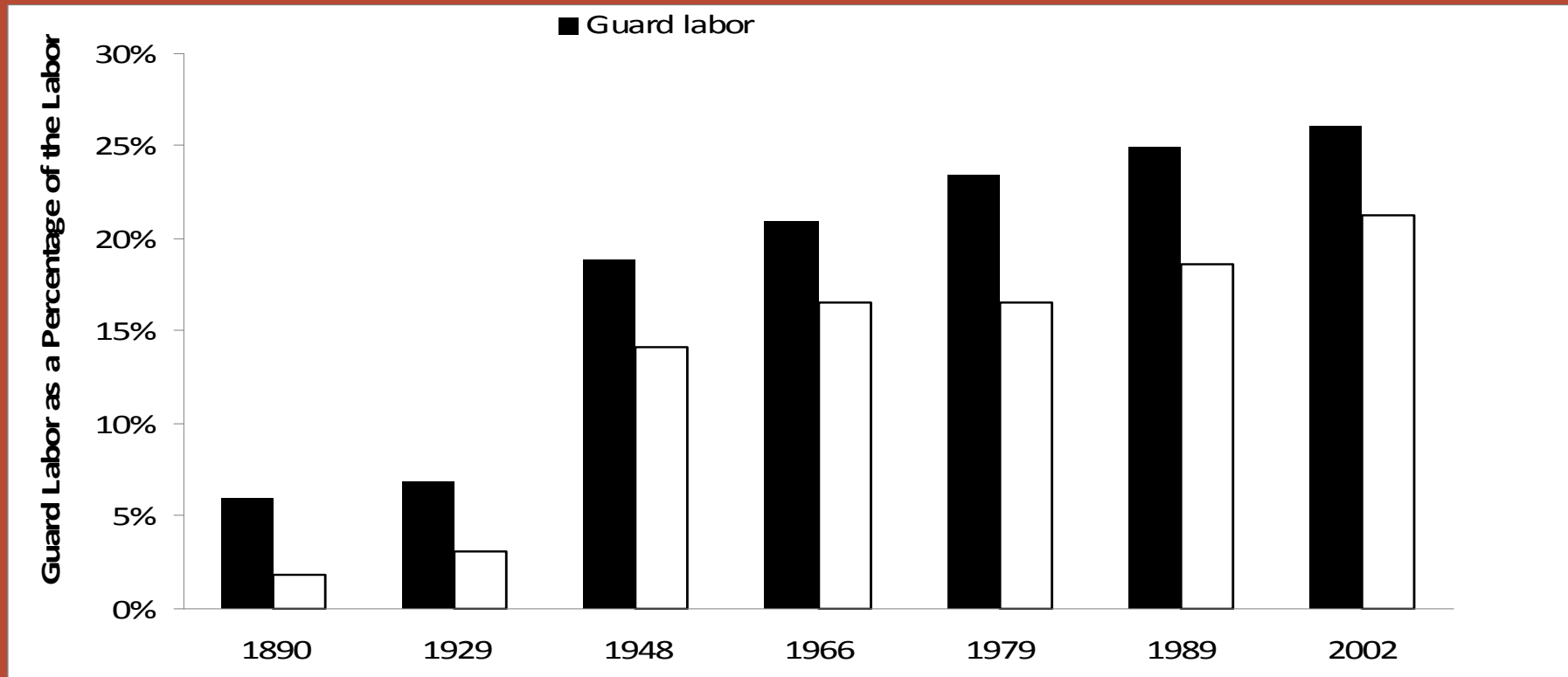
The “guard labor”

(Bowles and Jayadev JDE 2006)

- The guard labor is a measure of the disciplinary apparatus of a society
- It counts labor resources allocated to preventing, controlling, punishing, undesirable behaviours by others
- Work monitors, police, private security guards, prisoners, unemployed workers, military personnel.
- Guard labor is a typical defensive expenditure. It is mainly a response to declining trust

Why GDP may grow?

The evolution of “guard labor” in the US



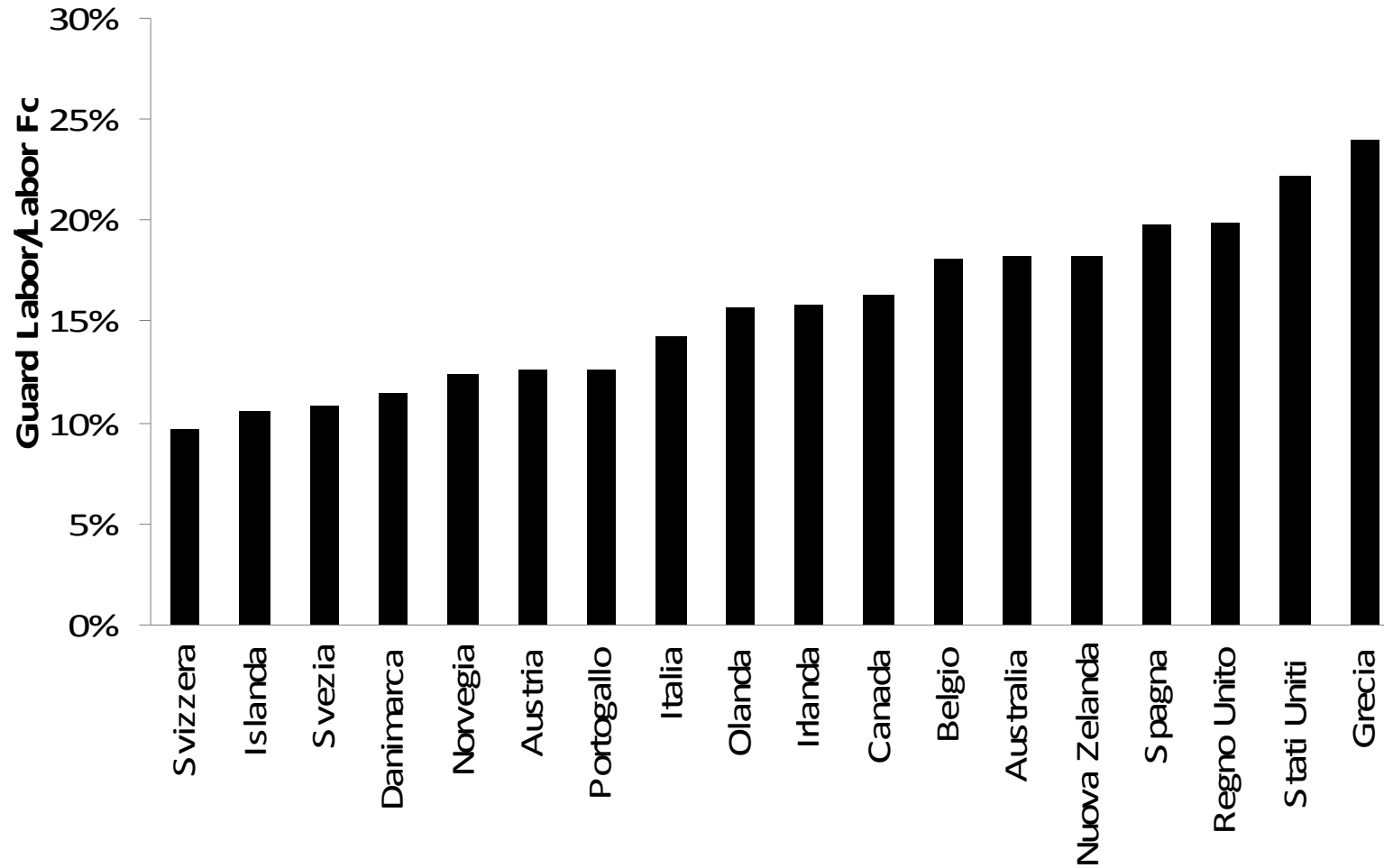
- Guard labor
- Guard labor without unemployment

Percentage of “guard labor” on the labor force 1890-2002

Notice:

- The result does not depend on the military personnel: now it is less than 1/3 than it was 40 years ago (peak in 1966)
- Defensive expenditures are under-estimated: monitoring technologies, protection technologies, even lawyers

Guard labor: international comparisons



Source: Bowles and Jayadev, 2006

Conclusion: NEG and GDP

- To use GDP as an indicator of well-being can seem particularly absurd if a GDP increase can be the consequence and the cause of social and environmental decay

GDP and social models

To question GDP is to challenge an economic and social model seen by many as the example to follow: the US

Buying alone

The Making of the American Consumer as the
Prologue to the Current Crisis

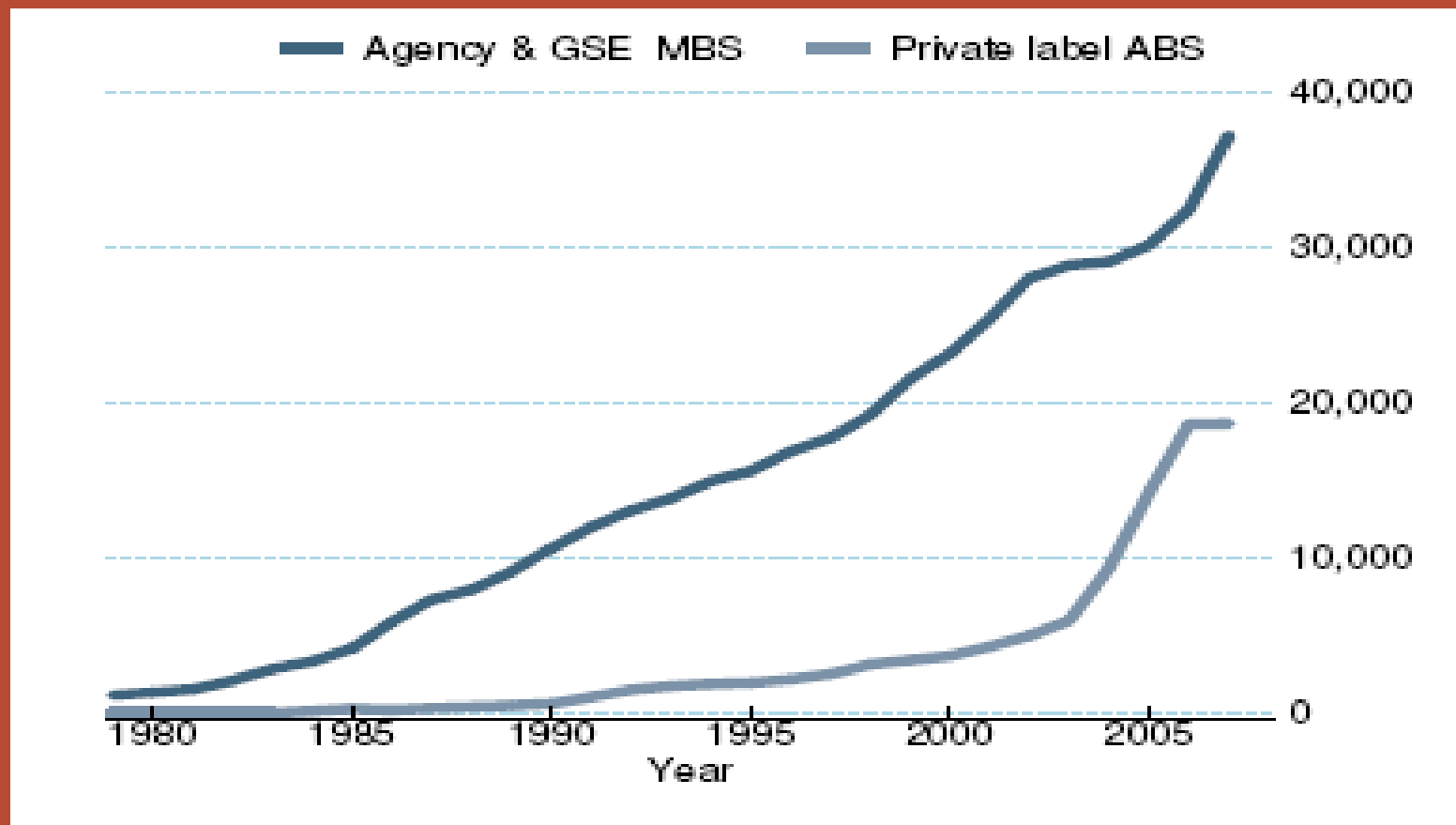
The answered question

Many analyses try to answer the question: Why did an initially small and localized default crisis (sub-prime mortgages in US) become a dramatic global financial crisis?

The answers generally focus on credit supply:

- The abundance of capitals inflows in the US coming from abroad which determined a credit bubble and financed a consumption boom
- The lack of transparency of the default risk implicit in structured assets derived from the securization of mortgages and loans

Securization of mortgages: growth in structured assets (US \$ per household)



Source: Jagannagath et al. 2009

The unanswered question: Credit demand?

- What has driven the high credit demand in the US?
- Credit demand has been driven by consumption demand

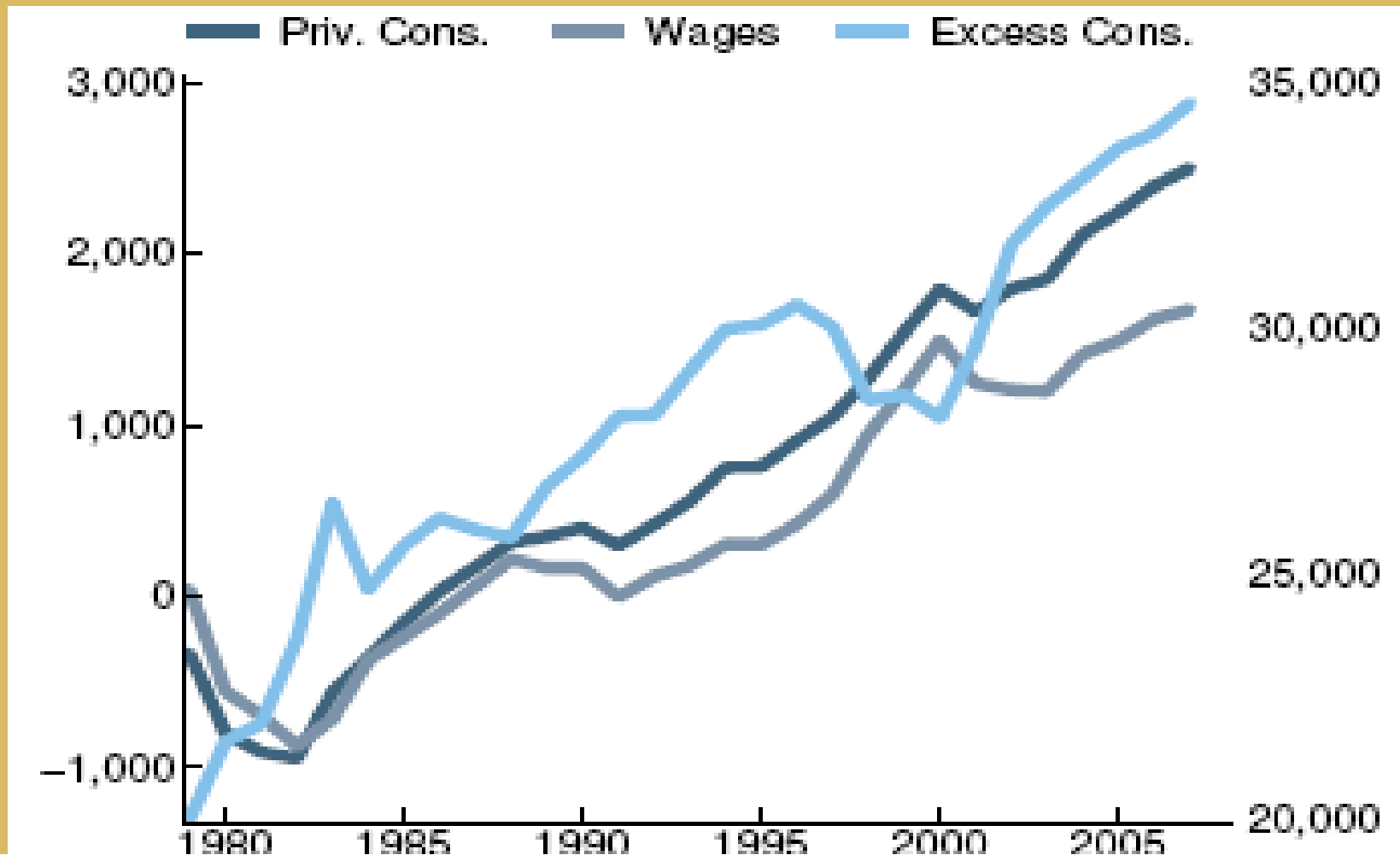
The premises of the crisis: The formidable American consumerism

- The American consumer has been the engine of the world economy in the last two decades
- ... although powerful forces were pushing towards a limitation of the consumption potential
 1. Increase in inequality
 2. Loss of competitiveness of the American economy (1996-2007: + 600% CAB deficit)

Income was redistributed from US citizen-workers to foreign-workers and owners of capital

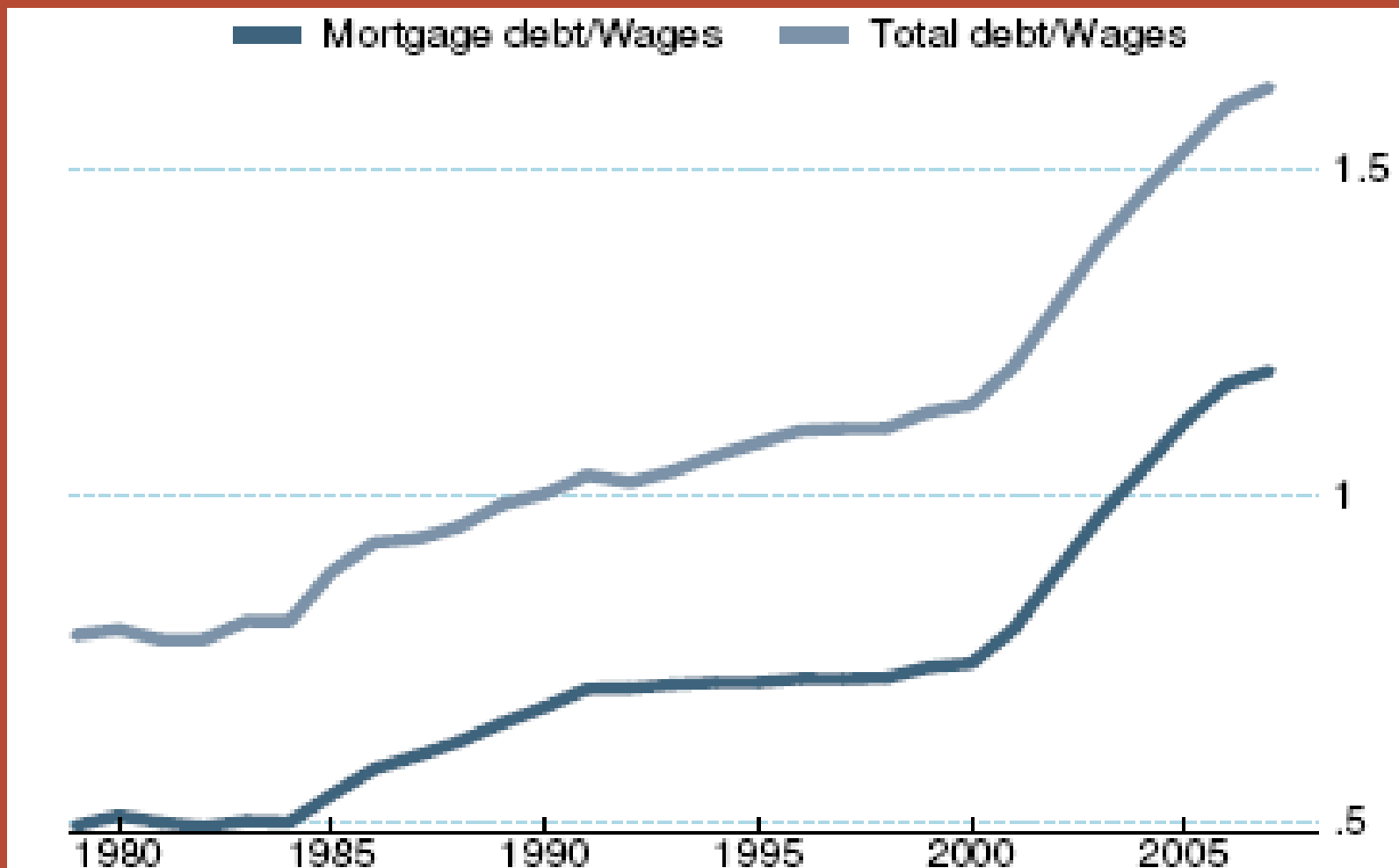
The premises of the crisis: The formidable American consumerism

Private consumption increased more than wages
(1979-2007, US 1980 \$ per-household)



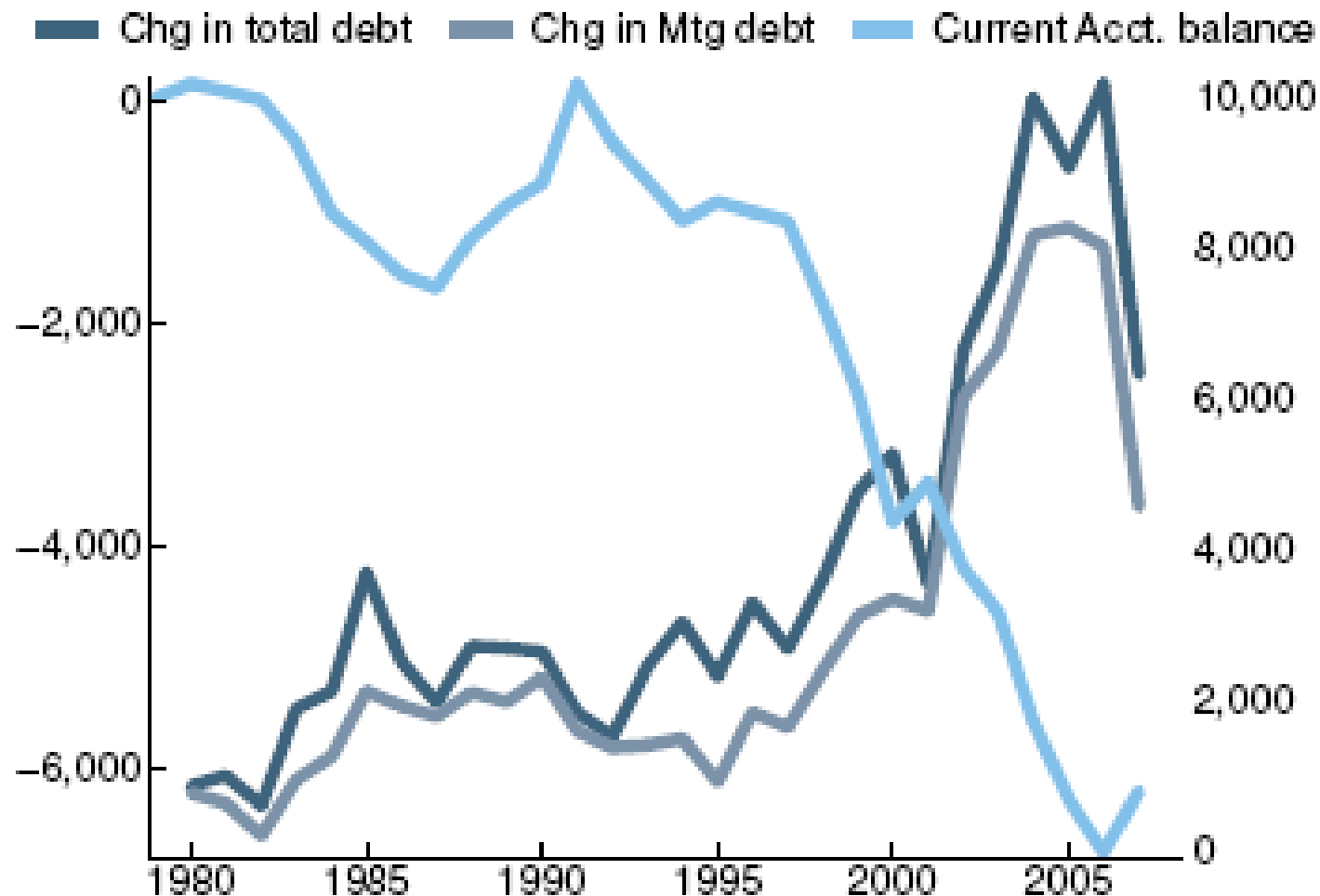
How Americans financed their consumption: The households' debt

Ratio of debt (mortgage and total) to wages



How Americans financed their consumption: The households' debt

The households' debt increases as the CAB worsens (US \$ per household)



The enormous debt of American households

- Americans lived for a quarter of a century beyond their possibilities. Mortgages and credit cards were the way Americans bought bigger and nicer houses, and more consumption goods, than those that they could have afforded

The overlooked question

- What have driven Americans to accumulate an enormous debt, in order to finance their consumption, which was already the most affluent of the world?
- What drives individuals to consumption bulimia, sacrificing collective infrastructure, environmental and social assets, human relations, leisure, in economies that grow ever more affluent and productive?
- More than that: this consumption bulimia was financed by going deeply into debt, namely sacrificing future living standards

An explanation: Wealth illusion created by the increase in home prices

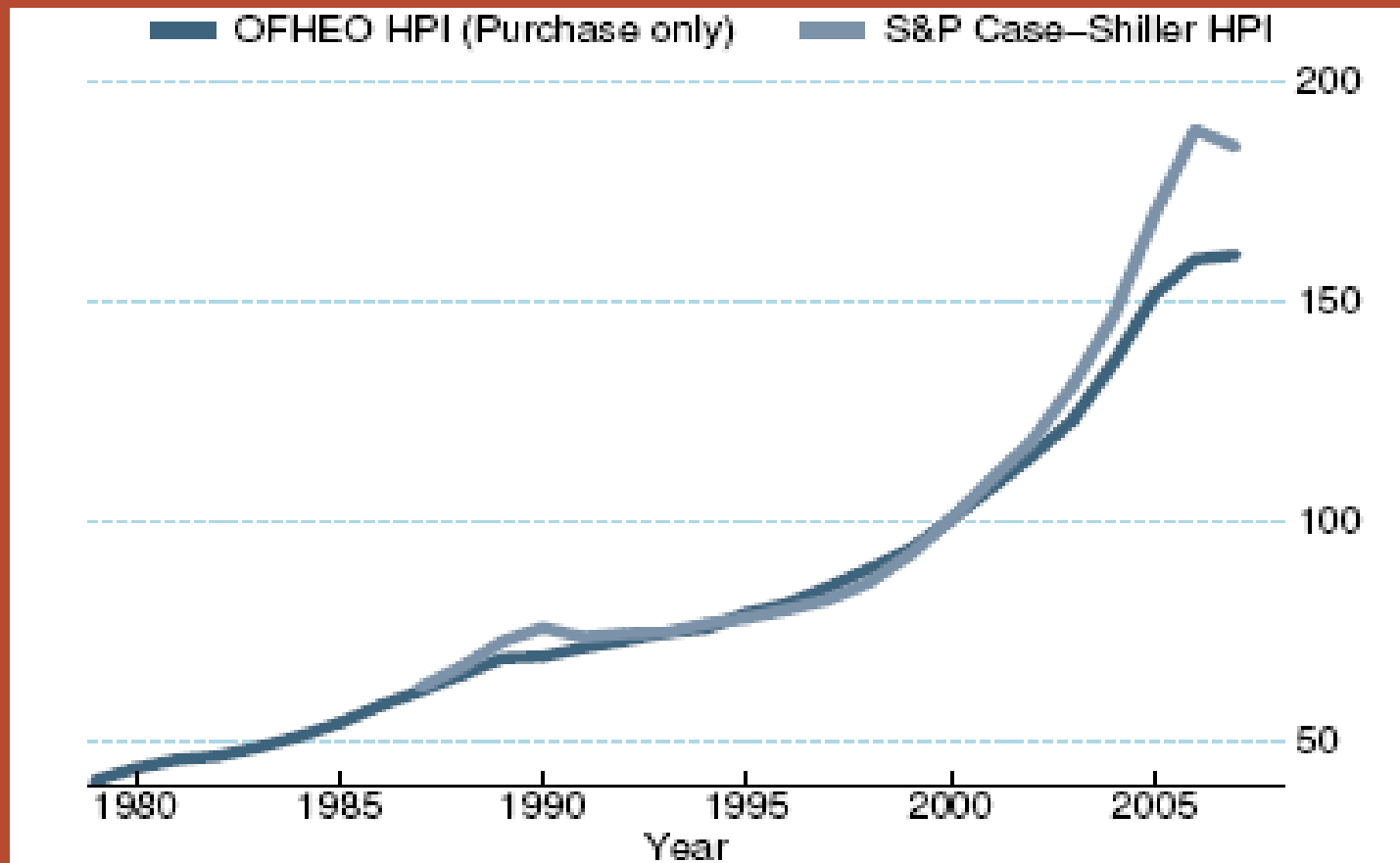
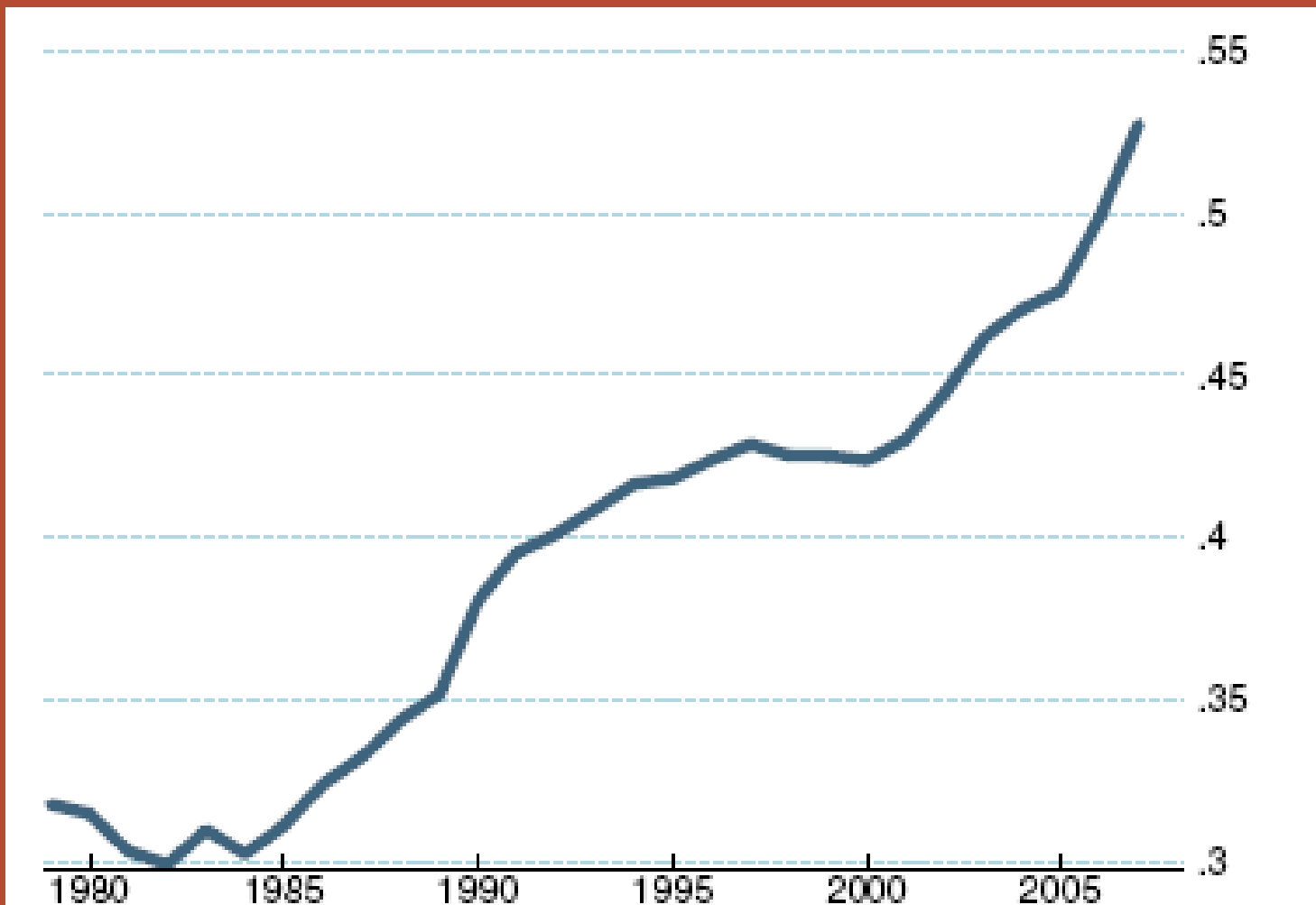


Figure 13: Home Price Indexes. Sources: FHFA and Standard & Poors

Debt grew much more than home values

Households' residential mortgage debt divided by residential home values (primary residence only)



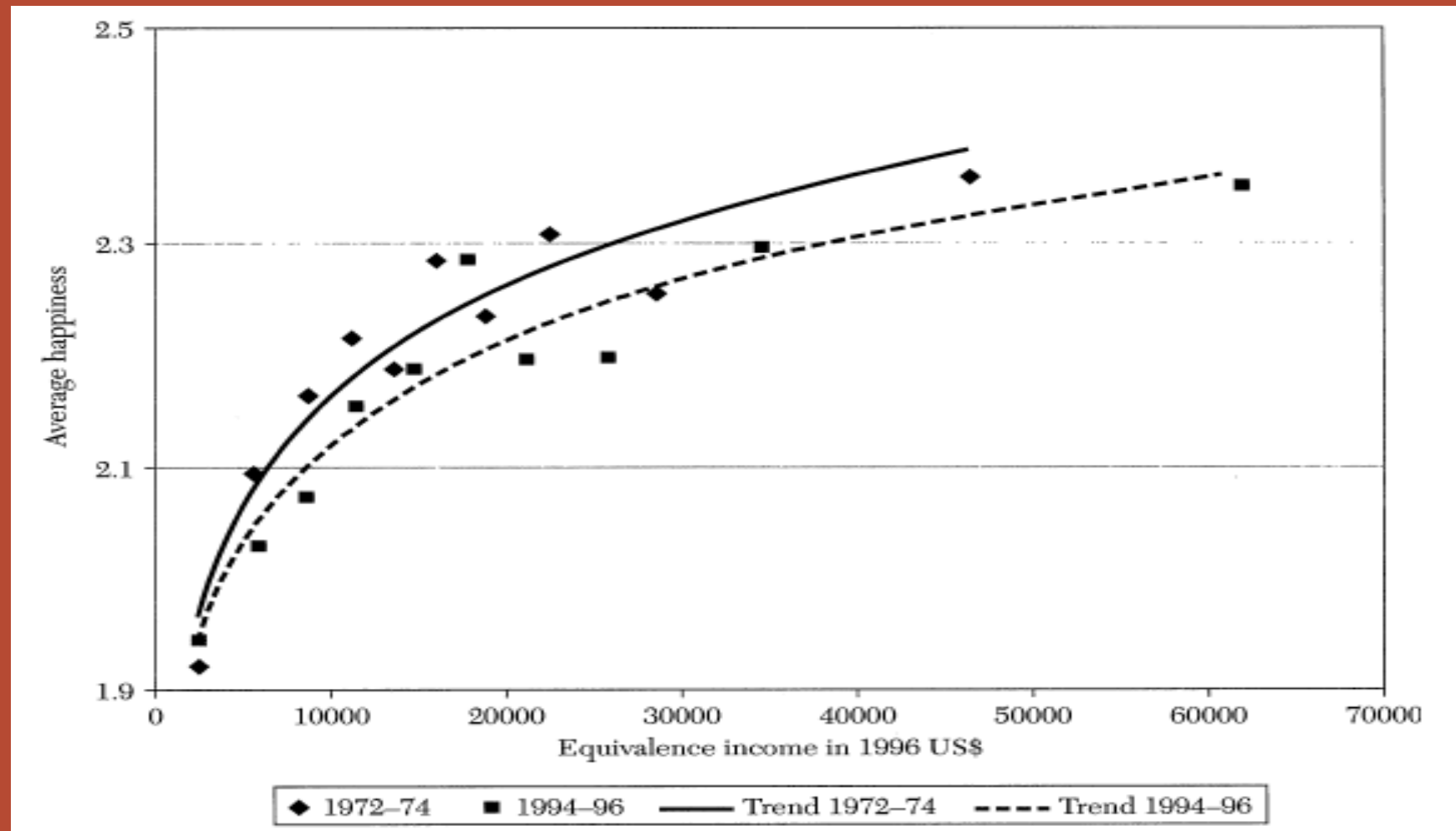
The NEG answer

- NEG describes consumerism as an answer to the decline in common goods
- The formidable american consumerism can be driven by the decline in relational goods
- In a society of lonely people consumption provides a form of identity: “I buy hence I am”

Which target for increasing well-being? Conclusion 1

- An increase in income is hardly a realistic perspective for substantial growth in well-being
- However, income matters for the well-being of low-income individuals

Income matters for the well-being of low-income individuals



Which target for increasing well-being? Conclusion 2

- How to reduce poverty? In a society freed from mass poverty redistribution is more reasonable than growth
- Such a society should largely target something different from growth, in order to increase well-being
- Relational goods are a reasonable candidate to be the “something different”
- **But what can be done? What policies can enhance relational goods?**

Key questions for policy

- Why are relational goods in the US (and UK) declining? And why are these tendencies better in Europe?
- Is there any social, economic or cultural difference that motivates these international differences?
- What can we learn from these studies regarding the type of social and cultural organization capable of promoting relationships and happiness?

The Role of Materialistic Values

- Materialism consists in giving a heightened priority in life to extrinsic motivations such as money, consumption, success and a low priority to intrinsic motivations such as relationships.

Materialism and Relationships

Evidence from social psychology

Materialistic individuals have lower quality relationships with others:

They are less:

- generous
- empathic
- Cooperative

They tend more to:

- instrumental friendships
- cynicism
- distrustful of others

Materialism and well-being

Evidence from social psychology

Materialistic people:

- are less happy
- have greater symptoms of anxiety and irritability,
- have a higher risk of depression
- watch more television
- consume more alcohol and drugs
- are unhealthier

Why are relationships degenerating?

The diffusion of materialistic values

- USA: percentage of university students who believe that an outstanding economic condition is an essential goal in life

- 39% in 1970
- 74% in 1995

In 1995 this had become the main goal in life.

Percentage identifying items as a part of the good life

	1975	1991
• A lot of money	38	55
• A job that pays much more than average	45	60
• One or more children	74	73
• Happy marriage	84	77
• Interesting job	69	63
• Percentage who thinks they have a very good chance of achieving the good life	35	23

Therapies: Policies for Relational Goods

How can we build an economy and a society that are more attentive to the relational aspects of life?

It is necessary and possible to change our:

- Cities
- Media
- Work
- Schools
- Health system
- Democracy
- Culture





Changing our cities

- For 5000 years, cities have been regarded as a gathering place
- Recent evolution:
 - The decline of relational areas
 - Commercial malls as relational areas
 - Traffic: the city for cars
- The modern city is a gathering place only for production and consumption
- The main victims: generational inequalities

Advertising, identity, happiness

- “I’m an ad-man. My mission is to make you drool. In my line of work, nobody wants you to be happy, because happy people do not consume” (Frederic Beigbeder, famous advertising executive)
- “I buy, therefore I am. The brand defines the consumer. We are what we wear, what we eat, what we drive. The collection of brands with which we surround ourselves has become one of the most direct expressions of our individuality,” (The president of a large consumer goods multinational)
- “Advertising at its best is making people feel that without a product, you are a loser” (Nancy Shalek, president of the Shalek Agency)

The generational nature of the decline of happiness and relationships

In the USA, with regard to the preceding one, each new generation:

- declares itself less happy
- has a higher probability of mental illness
- has worse relationships
- has greater materialistic values

- **WHAT HAS CHANGED IN THE LIFE OF CHILDREN?**

The life of children has changed in the last decades

We have created for them a life as small adults

- Growing commercial pressure. Born to buy?
- Growing pressure on their time. Born to work?
- Growing relational poverty

Advertising and children

- *“Advertising at its best is making people feel that without a product, you are a loser. Kids are very sensitive to that ... You open up emotional vulnerabilities and it is very easy to do with kids because they’re the most emotionally vulnerable (Nancy Shalek, president of the Shalek Agency)*
- “There are only two ways to increase customers: either you switch them to your brand or you grow them from birth”, (James U. Mc Neal, professor of marketing at Texas A&M)

Advertising and children

- All of these people understand something that is very basic and logical, that is if you own this child at an early age, you can own this child for years to come. Companies are saying: Hey, I want to own the kid younger and younger and younger.” (Mike Searles, president of Kids ‘R’)
- When it comes to targeting kid consumer, we at General Mills follow the Procter and Gamble model of “cradle to grave”. We believe in getting them early and having them for life”, (Wayne Chilicky, executive at General Mills).

Changing our cities: space and transportation

- The pivotal points of the problem are the organization of public space and of transportation
- Relations require quality pedestrian public areas
- Relations needs to be protected from traffic

NO EXIT

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SINGER (STREDWICK)

SUICIDE

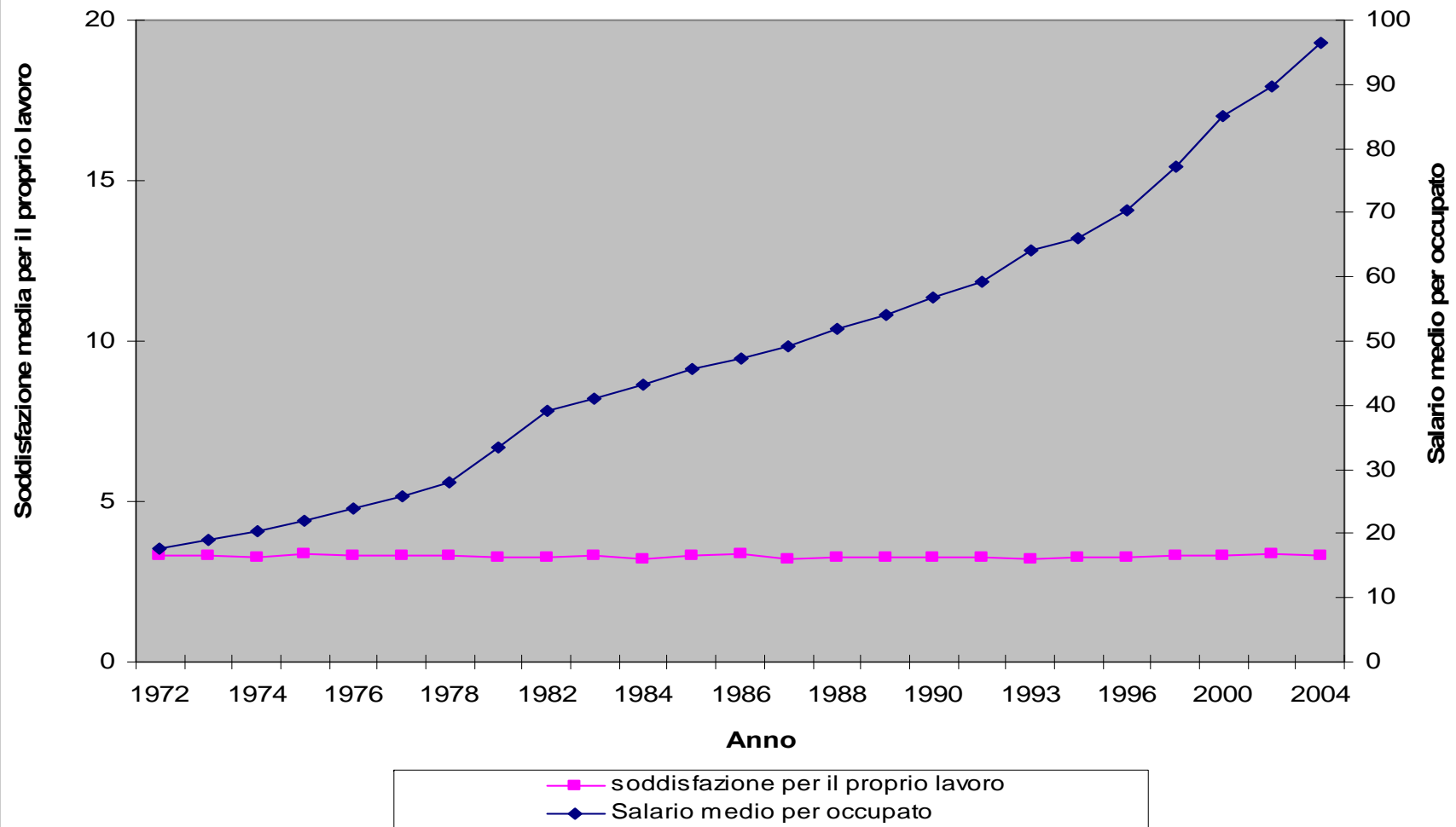


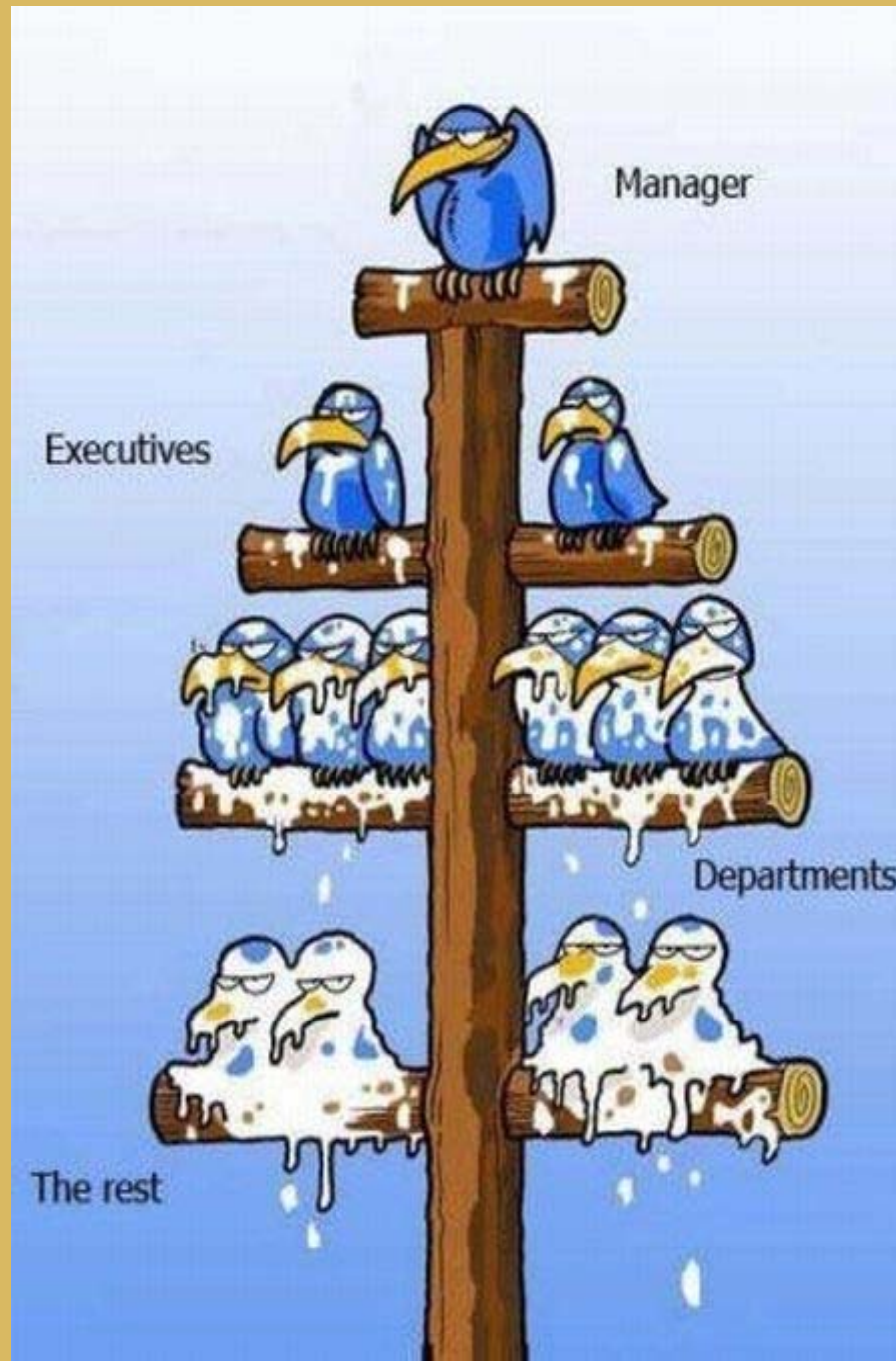
FREEDOM

Changing labor

Well-being in the workplace

USA: Satisfaction in one's job has not increased in the past 30 years despite an increase in wages





Changing labor

Satisfaction in one's job increases with:

- the quality of relations on the job (trust)
- the perception of control over one's work
- the opportunity to express one's capabilities
- the variety of tasks carried out

Changing labor: what should we do?

- Redesign the content of work processes so as to make them more interesting.
- Increase the degree of discretion and autonomy of workers
- Increase the compatibility between work and other aspects of life.
- Improve the relational content of working life.
Entrepreneurial culture
- Reduce those aspects of occupational organization that produce stress: pressure, controls, incentives

Happier but less productive?

- According to many economists, stress, dissatisfaction, pressures, tensions, competition, conflicts and difficult relations, repetitive and boring tasks are the price to pay for high production
- But psychological studies of the organizations do not confirm this belief
- Workers who are more satisfied have a higher “organizational citizenship”, that is the capacity of cooperation with others and with the organization in which they work in ways that are not strictly connected to their assigned tasks

Satisfaction on the job and productivity

Studies on “organizational citizenship” document that workers who are more satisfied :

- are more practical, collaborative and friendly
- change their jobs less frequently
- are less absent, more punctual and willing to help their colleagues
- The well-being of workers prefigures also the satisfaction of clients
- These correlations are stronger in relatively complex occupations

The limits of incentives

- Bonuses and controls tend to shift the efficiency of the performance to that which can be measured to the detriment of that which cannot
- Incentives work well when performance is highly measurable and when the task is extremely boring and repetitive
- But this is not the general case
- **The message: it is not possible to build an efficient economy completely free of incentives. But we must invert the tendency of considering them as all that matters.**

Changing our schools

Schools teach:

- The time for production is not the time for well-being
- Passivity with regards to one's education
- Subordination of one's physical requirements to the needs of production
- Haste
- Competitiveness
- A relation with power
- That intrinsic motivations are not important

A school that functions: Liberal Arts Colleges

- “Knox's unique penchant for self-expression, conversation and tolerant debate Students are encouraged to take on their own research projects, participate in off-campus programs, even design their own majors.Knox is also an engaged place, where students actively participate in the governance of the College, and the issues of the day are openly—though respectfully—debated in and out of the classroom. You'll acquire the freedom to flourish.you'll develop your own personal educational plan uniquely suited to your educational goals and aspirations in life... (This will) give you complete ownership of your education “.

Conclusion: intrinsic motivations and the culture of stress

- The entire economic and social organization is based on the underestimation of intrinsic motivations and this is based on our culture.
- Once these intrinsic motivations have been forgotten, we are left with the **culture of stress**. It tells us that stress is a way of managing situations, guiding people, resolving problems. It is the same culture that directs the education of children, the organization of labor, as well as the entire socio-economic organization.

Changing our culture: the sense of the possible

- The human mind invented the alternative, that is the capacity to conceive change. For mankind, the possibility precedes the reality. This makes humans capable of adapting the environment for needs they see as their own, first of which is to make life easier and more enjoyable.

Our culture instead ...

- The cultural and educational choices of advanced societies systematically favor the capacity of individual adaptation, taking the economic and social environment as a given, to the detriment of the capacity of adapting this environment taken instead as a human product (the sense of the possible)

We need to know more

- The development of policies for relational goods requires more research. We should not devote lesser efforts to this research than those that we devoted to develop policies for economic growth