

Agency, Gender, and Economic Development in the World Economy 1850-2000

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Institutional setting

Cooperation between the research group on economic and social history at Utrecht University, the Virtual Knowledge Studio for the Humanities and Social Sciences and the International Institute of Social History.

Period of funding

June 1st, 2011-June 1st 2016

Composition of the Research Team

Main applicant: Prof. dr. J.L. van Zanden	Utrecht University	Promotor
Co-applicant: Dr J. Kok	Virtual Knowledge Studio for the Humanities and Social Sciences Katholieke Universiteit Leuven	Co-promotor (project 1)
Beoogde Uitvoerders: unknown		
Other members of the research team: Prof.dr. M. Prak	Utrecht University	Co-promotor (2)
Dr. T. de Moor	Utrecht University	Co-promotor (3)
Prof.dr. L. Heerma van Voss	International Institute of Social History Utrecht University	
Prof.dr J. Lucassen	International Institute of Social History Free University of Amsterdam	

Structure of the proposed research

The research programme endeavours to explore how 'agency', conceptualized as the potential for individual decision-making at the levels of households, economic activity and political participation, contributed to global economic development and vice versa. This question, which is at the core of current theorizing in economic history, requires innovative use of existing datasets and creation of new datasets, elaboration of concepts and theories in collaboration with leading experts, and extensive and careful cooperation between researchers working at both micro and macro levels. In the description below, we will provide an outline of the research questions, the theoretical challenges to be dealt with, and the data sources to be used and construed. Then, we describe the four subprojects carried out by

three Ph D students and a postdoc. Between the researchers there will be intensive communication as they will work with the same datasets – approached from different angles.

The subprojects are 1. household formation, marriage patterns and economic development (IISH); 2. political participation and economic development (UU); 3. human capital formation and economic development (UU) and 4. An integrated approach to agency (postdoc) (VKS). Van Zanden will supervise all projects, projects 1 will be co-supervised by Kok, project 2 by Prak and project 3 by De Moor. The synthesis will be written by Van Zanden, Kok and the postdoc.

Description of the proposed research

Central question

Does economic development contribute to and result in more ‘agency’, the power of individuals to decide for themselves? And is the reverse also true? Can we find a link between historical developments (e.g. the advent of literacy) and institutions (laws, family forms, political systems) which promoted agency and the actual economic developments in the various countries of the world? Nobel Prize laureate Amartya Sen (1999) already argued that the ‘freedom’ to realize one’s potential is a major determinant and contributing factor of economic development. A crucial factor in this respect is ‘human capital formation’: education will increase the agency of people - enhance their possibilities to shape their own lives – and is at the same time an essential ingredient of economic development. We aim to study these interrelationships in depth, with a specific focus on gender. Given the crucial role of women in socialization (producing human capital of the new generation), we will look closely at (institutions creating) gender differences in agency.

Thus, we study the interaction between agency and economic development at two, interrelated levels: at the micro level of household and family formation (are men and women allowed and able to make their own choices in this respect, or are – for example – marriages arranged?) and at the macro-level of the state (are people allowed and able to be involved in the political decision making process?). We have developed innovative ways to measure these variables on a global scale. This will allow us to contribute significantly to the important debates among social scientist and historians about these links. Moreover, we think that adding the dimension of gender will deepen the analysis of these relationships.

One or two generations ago, social scientists and historians, especially those trained in the ‘modernization paradigm’, would consider these links as unproblematic, as ‘modernization’ was seen as a broad process including economic development, the spread of political democracy, the growth of individualism and the decline of sex discrimination. Recent (and some not so recent) criticisms of the modernization paradigm have pointed out that these links are more complex than was originally thought, and that substantial economic growth can occur in societies without fundamentally changing their political regime (communist China is the obvious example), or may even reinforce hierarchical relationships in household and marriage (as the revival of patriarchy in various Islamic countries suggests). Instead of relying on this modernization approach, the current proposal uses a number of new theoretical ideas and debates as sources of inspiration.

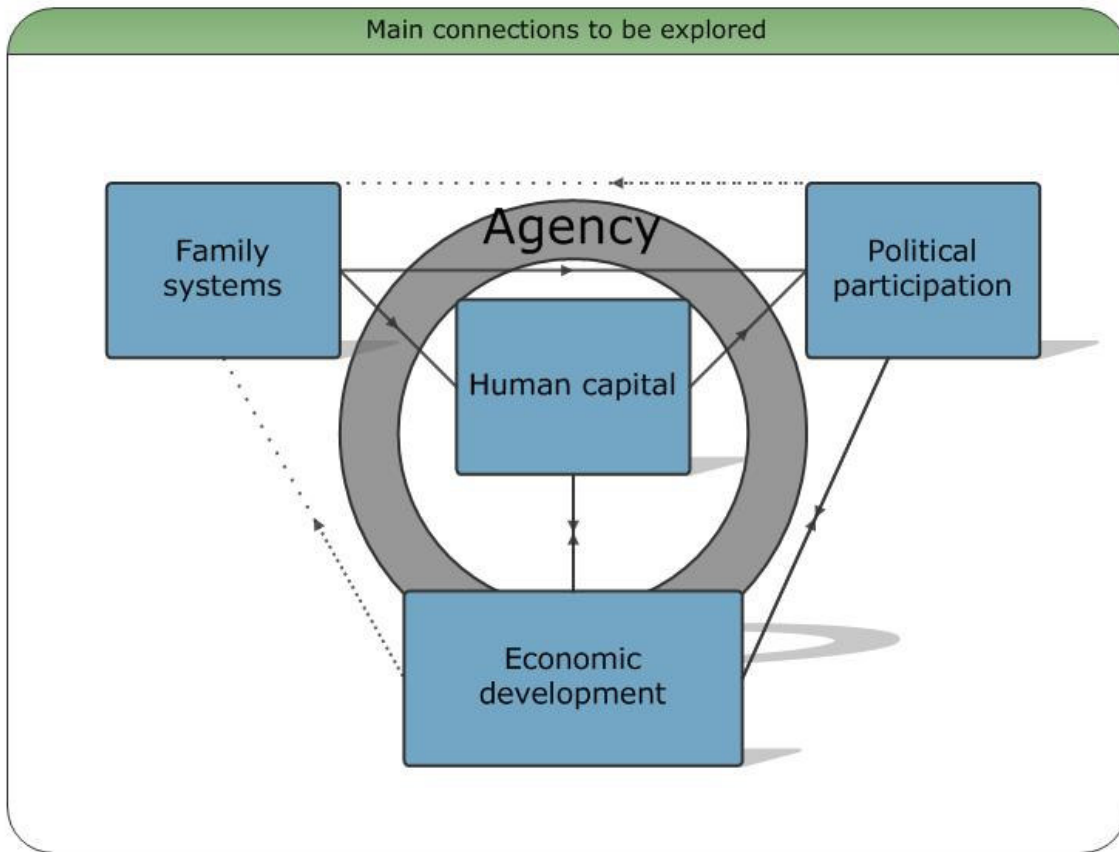
Operationalization: the dimensions of family system, political system and human capital

We specify the different theoretical approaches used in the descriptions of the sub-projects, but to summarize our approach, an overview of the main causal links to be investigated is given in the Figure below. An important theoretical starting point is the literature on the role of the empowerment of women in economic development. It suggests that there are strong links between the level of female education, women’s demographic behaviour (in particular fertility), and the level of investment in the human capital of the next generation. Behind this reasoning is the famous switch from ‘quantity’ to

'quality' of offspring, introduced by Gary Becker (1973). The idea is that the costs of getting and rearing children are primarily borne by women; it is, in economic terms, women's time that counts as relevant opportunity costs. Therefore, the level of education of women (their productivity and the opportunity costs of their time), will determine whether parents will have many children with low levels of education, or a few with a high level of education (the Becker trade-off). This idea is supported by modern demographic research and it has also been demonstrated that the level of education of children is determined to a significant extent by the human capital of the mother – and less so by that of the father (e.g. Brown 2006). However, the valuation of children, and especially son preference, differs between family systems which has a direct impact on the quantity-quality trade-off (Mason 2001).

There is, therefore, a close connection between family systems and human capital formation – a connection that is the topic of subproject 1. In the second sub-project we add the political-institutional dimension. We want to contribute to the growing literature which analyzes the links between political institutions and economic development, also by connection it to the level of family systems. As our starting point we use Emmanuel Todd's ideas about the relationship between family systems (defined through co-residence of three generations in households and inheritance) and the existence of broad, global differences in political ideology. In his view, family systems stand for persistent elementary interpersonal relationships, which are transmitted from one generation to the next and form the roots of global variation in attitudes towards equality and authority. Partible inheritance implies equality among siblings, at least among brothers, whereas impartibility sets one favoured child apart from the others. Authoritarian family systems prescribe co-residence of married children with their parents (stem or joint families), whereas in non-authoritarian systems neo-local residence of married couples is the preferred pattern (nuclear families). We will use his notions to explain why certain societies experience, during the process of economic development, a relatively unproblematic change towards democracy, whereas in other parts of the world this change has been difficult and incomplete. This may, in the long run, also have negative consequences for the process of economic development itself, as is implied by New Institutional Economics. The third sub-project on human capital formation focuses on a key dimension of agency; it studies how agency at the micro and macro level is affected by education (and other forms of human capital formation), and it will also quantify this important dimension of agency. The post doc will bring the different strands in the project together, in terms of both data and concepts. He/she will develop an empirical, gendered and multidimensional model of 'agency'. In the synthesis the applicants and postdoc will integrate the insights and results of the project, and map the interactions between agency and economic development in detail.

The picture presented in the figure below is still highly simplified, but this framework has already been developed and tested partially for explaining the long term evolution of the European economy (Van Zanden 2009). The dotted lines indicate possible connections in the reverse direction. These will also have to be specified.



Data

The project will invest in combined, improved and new global datasets of the variables involved and their development over time between about 1850 and 2000. We make use of and add to the growing body of global data collected at the IISH, by means of peer groups of global experts who agree to share data. Already, files on economic performance, labour relations, migration and collective action are available and expansion is intended (in the dataproject CLIO-INFRA, www.clio-infra.eu). Thus, our project will closely cooperate with the IISH long-term research into Global Labor History.

Our strategy of collection and analysis is, firstly, to study interrelations between variables on a global scale, and, secondly, by focusing on certain regions that represent typical patterns of development. Thus we will compare Western Europe as an example of early development of institutions that allow for high levels of agency, with sub-Saharan Africa, India and China as examples of different developments paths.

The main global datasets that will be constructed are the following. The family systems dimension of the project is concerned with data on marriage patterns and household formation. As a starting point we use the improved Murdock Ethnographic Atlas, which covers 1262 different societies spread across the whole world, and which summarizes the knowledge about these societies as collected by ethnographic research in the 19th and early 20th century (the dataset is available at <http://eclectic.ss.uci.edu/~drwhite/worldcul/atlas.htm>). Moreover, for large parts of the world data on average age of first marriage of men and women is available, as well as data on divorces and the

composition of households (IPUMS-International). We are particularly interested in data linked to the degree of agency of women and men in the marriage process: is marriage arranged, and – an indirect indicator – at what age does marriage occur (arranged marriages are often at a much lower age than marriages based on consensus).

The political dimension is concerned with the degree of agency and of citizenship that exists in the political arena of nations. We will look into processes of democratization and relate them to the values underlying gender roles and to patterns of authority at the micro level. We will also take into account patterns of state formation before the onset of the Industrial Revolution. For the latter we can rely on the improved Murdock Atlas, and/or by the Bockstette et.al. (2002) dataset. To measure the quality of democracy for most of the countries involved, we will use the well-known Polity IV dataset. Some additional research will be necessary to measure the actual degree of involvement of citizens, and the quality of their citizenship.

The third dimension is concerned with human capital formation. Firstly we will concentrate on the usual measures such as levels of literacy, of ‘age heaping’ (a method to measure numeracy) and the number of years of education, of both men and women. A lot of work has already been done in this field (see for example the recent Morrison and Murtin 2008 dataset). Data can be collected relatively easily from various working papers and websites (via CLIO-INFRA there is intense cooperation with the research group of prof. Joerg Baten at Tübingen University, who is collecting the same kind of data). Recent literature also suggests other, alternative measures of human capital – such as discipline or prudence – which will also be considered in the analysis (Mokyr and Voth forthcoming).

Finally, we need measures of the economic development of countries. Data on GDP per capita, the most usual yardstick, are available via the Maddison dataset. In addition, we consider using the Human Development Index (as reconstructed by UN, and also inspired by the work of Sen) as a proxy for economic performance. We will, during the project, combine these to develop a more experimental measure of economic development, explicitly based on the various (economic, political, demographic) dimensions of agency that we analyse in the project.

In our data collection we will follow the strategy developed for the CLIO INFRA project (www.clio-infra.eu) to concentrate firstly on a group of 25 relatively large and more or less representative countries which together account for about 70-85 % of world population.¹ For some parts of the world – in particular Europe – it will be relatively easy to extend the dataset, increasing the coverage to about 90% of global population and to perhaps 80-100 countries. For the most recent period – after 1960 – it will be possible to get a global coverage for most of the variables involved.

The project is, in our view, highly innovative because it brings together in a new way expertise and theoretical questions from different disciplines (economics, demography, sociology, and history), because it will use new methods of testing and exploring these ideas - in particular its global coverage combined with its ‘deep’ historical approach is new.

Subprojects

1) Agency, gender and family systems

In this subproject we will elaborate on existing typologies of family forms in the world, in particular with respect to female agency. Moreover, we will link our indicators to economic performance. Well-known is

¹ In Asia: China, India, Japan, Indonesia, Thailand, Turkey; in Europe: UK, Netherlands, France, Russia/USSR, Germany, Poland, Italy, Spain, Sweden; in Africa: Egypt, South Africa, Kenya, Nigeria; in the Americas: US, Canada, Mexico, Brazil, Argentina; and Australia.

the typology created by John Hajnal (1965, 1982) who was the first to show that family formation in north-western Europe was characterized by late and infrequent marriage, when compared to the rest of the world. In addition to late marriage, the area stood out with the life-cycle service and neo-local household formation. Another rather influential typology, based on the combination of co-residence and inheritance practices, has been developed by Emmanuel Todd (1985, 1987, 1990). Based on differences in kinship ties, David Reher (1998) has sketched 'weak' and 'strong' family systems in respectively north-western and southern Europe. Others focus on the nature of differences in interpersonal relationships between property-based and power-based societies (Tsuya et al 2010). Finally, Göran Therborn (2004) has proposed a 'geocultural road map' that divides the world into broad regions in which people (even belonging to different religions) share basic attitudes towards sexuality, marriage and gender relations.

For our purpose, we will take out crucial elements from these typologies, and combine them with data from population censuses (IPUMS) and the Ethnographic Atlas, to arrive at a 'world map of female agency'. We will focus on patterns of marriage, co-residence and inheritance.

Marriage. Even now, there are wide differences in the world in parental control on marriage as well as in age at marriage, differences that strongly reflect past patterns (Kalmijn 2007, Therborn 2004). Clearly, arranged marriages at an early age reflect much less agency and autonomy than a free choice of partner at a relatively advanced age. According to Edlund and Lagerlöf (2006), the shift from arranged to the 'love' marriage redirected marriage costs from the parents to the couple, inducing investment and human capital accumulation. Moreover, when wives were (much) younger than their husbands, their position tended to be weaker still (Todd 1987). Culture and religion co-determined the relative positions of husbands and wives. Finally, demographic imbalances at the marriage market may exert an influence of their own. Thus, a relative scarcity of women might strengthen their bargaining position (Angrist 2002).

Co-residence. According to anthropologist Michel Verdon, people will strive to live in 'atomistic', nuclear families, in order to maximize their individual autonomy (Verdon 1998). However, as one's livelihood often depended on co-working an indivisible family plot, co-residence of several married couples occurred frequently and in many forms. When the older couple remained at the head of the extended household, the autonomy of the younger generation was often severely limited. In cases of 'community families' with more than two co-residing couples, as in China, authority depended on (male) birth order as well (Lee and Campbell 1997).

Inheritance. Family norms regulate the transfer of material assets from one generation to the next. Rules of transmission favoring one child over the other, or one gender over the other, affect personal agency and thus human capital formation. There are diverging hypotheses on the causal mechanisms. According to Todd (1987) the strongest positions for (relatively older) women occurred when women could inherit and were part of the senior couple in a multigenerational household. In his view, the 'stem family' societies of Central Europe and Japan, offered women strong positions with a beneficial effect on educational investments. However, other authors emphasize the positive effects of 'uncertainty' with respect to inheritance. Thus, in the 'absolute nuclear family systems' of, among others, Holland and Great Britain no one was assured of an inheritance, leading to a relatively individualistic and enterprising mentality, which in its turn was related to economic success (Duranton et al 2009).

With respect to demographic behavior we expect that gender equity and (female) agency is reflected in access to education and relatively early adoption of birth control. Female agency will also be reflected in female labour market participation and limited gender wage differentials. The family-related agency indicators will also be directly related to the economic performance indicators (e.g. Kick et al 2000).

One of the challenges will be to uncover the direction of causal chains. Past family patterns explain not only the current regional variation (within Europe) in housing and care for the elderly by children or

other kin (Keck and Blome 2008), but also economic performance (Duranton et al 2009) and demographic behaviour (Kalmijn 2007). What is still unknown, however, is by what mechanism of path dependency traditional family systems have survived and still exert influence. Family norms and marriage patterns may have a long history, but they are not immutable. Economic change can engender new behavior (e.g. earlier marriage; migration, nuclearization of families), which may stimulate or hamper further economic development. Thus, the project will also take account of alternative explanations for the relationship between family structures and economic growth and potential causal flows in the reverse direction.

2. Agency and the Polity

The second sub-project focuses on the 'macro' level of socio-political institutions, and the degree of agency – of political rights – that have been acquired there. It is well known that in the very long run there is a strong correlation between the quality of political institutions and economic development, but it is still unclear which is causing which. One school argues in the footsteps of Douglass North that constraining the executive – via democratic institutions – is a pre condition for economic growth; the Glorious Revolution of 1688 is classic example of such a link (North and Weingast 1989; more recently North, Wallis and Weingast 2009) Another, perhaps equally influential tradition, argues on the other hand that democratisation will induce the state to introduce redistributive policies which may harm economic growth (Acemoglu and Robinson 2006). Lindert (2004) on the other hand demonstrated that there is indeed such a link – democracy tends to lead to more social transfers – but their effects on economic growth are mixed, and social transfers on balance do not lead to a deceleration of growth. Economists therefore do not agree about the long term impact of democratic institutions on growth. There is also no consensus about the question what exactly causes the relationship between GDP per capita and democracy. The most promising contributions however focus on the role played by human capital formation – this appears to be the key variable explaining why improvements in institutions are realized (Glaeser et.al. 2004). In a related contribution, Glaeser et.al. (2007) have demonstrated that the main causal connection is that high levels of education create a class of people with clear interests in high quality political institutions. Increased education thus leads to democracy and enhances the stability of such institutions.

Within the context of this debate, the contribution of this sub-project is first to produce the global datasets that will make it possible to develop a better understanding of the changes since 1850 in the quality of institutions and the degree of agency enjoyed by the people involved. Secondly, we will develop and test new ideas about the links between gender relationships, patterns of household formation and changes in the quality of institutions. The key hypothesis that we will explore is that there are links between the character of institutions at the micro level – in particular the family and the household – and the capacity of societies to develop democratic institutions. Already Todd (1987) put forward the hypothesis that deep-rooted family norms determined a society's conception of *equality* (determined by inheritance rules) and *authority* (determined by co-residence patterns), and thus the foundation for democratic institutions. There is a rapidly growing literature arguing for similar links between gender relations and 'good governance'; Branisa, Klasen and Ziegler (2009) have in a recent review of this literature argued that 'social institutions related to high gender inequality inhibit the building blocks of good governance. In societies with social institutions favoring gender inequality political systems will be less responsive and less open to the citizens, so that voice and accountability will be reduced'. By including family-system indicators into the equation (for instance as a control or instrument variable), we will get more grip on the complex interactions between democracy and economic development.

This analysis will be combined with a study of the links between the quality of political institutions and human capital formation (in its turn, as we saw already, affected by family systems). Again, it is very clear that there exists a strong correlation between levels of education and democracy, and that the causal links are complex. By analysing transitions from high levels of authority to low levels, they show the impact of education on democratic development. We will test this hypothesis by extending the time period studied backwards to 1850, and by analysing interactions with the micro-variables mentioned already.

An important part of the project will be focused on measuring different dimensions or components of political 'agency'. We will use the already mentioned Polity IV dataset as a starting point, but the quality of that dataset for this kind of research has to be tested, and additional data have to be entered. For example, the Polity IV dataset does not include colonies, which means that large parts of the 19th-century world are not covered. Moreover, additional data on actual political participation (active and passive voting behaviour), preferably of men and of women, have to be collected and linked to quality of institutions. Not only the 'inputs' into the political decision making process are relevant here, the analysis should also include its 'output', in particular government policy towards education and human capital formation in general (building on the important work already done in this field by a.o. Peter Lindert 2004).

3. Agency, Human Capital and Economic Performance

The third sub-project focuses on human capital formation, and derives its source of inspiration from New (or unified) Growth Theory. The ability to read, write and calculate, and the results of education and training in general, are essential ingredients of 'agency'. They are necessary for understanding the world surrounding us, for coping with a market environment (eg. the importance of numeracy), and for taking 'rational' decisions about how to shape one's life in such an environment. Human capital is therefore an essential input into economic development (as stressed by new growth theory), but also an essential 'output', in particular when we define development in Sen-ian terms. Moreover, a high level of human capital is also considered to be crucial for developing efficient (socio-political) institutions (Glaeser et.al. 2004). For example, a certain level of literacy has been considered essential for the developing of democratic institutions in Western Europe (Glaeser et.al. 2007).

The first issue that will be central to this sub-project is the question which dimensions of human capital really matter? Or do different dimensions of human capital matter for different aspects of economic and socio-political development? Is, for example numeracy more important for economic growth (as is suggested by the 'age heaping' literature – see A' Hearn et.al. 2009 and De Moor and Van Zanden 2010), and literacy more fundamental for socio-political development? Is female literacy more important for demographic behaviour than male literacy (Schultz 1998)? The aim is to measure these various dimensions on a global scale (which is now being made possible as a result of the CLIO-INFRA cooperation), in order to study these links under more diverse conditions.

A related part of the project which will be addressed by the postdoc of this subproject (in cooperation with the project leaders), is how to conceptualize 'economic development'. Usually, GDP per capita is used to measure success or failure of countries. On the basis of the ideas of Sen, a more complex measure has been developed, the Human Development Index, which consists of a combination of GDP per capita, Life Expectancy, and Educational Achievement (it is in particular used by international organizations such as the UN – see <http://hdr.undp.org/en/statistics/>; for historical work on this see for example Crafts 2002). But if agency (or freedom) is the yardstick for development, a more radical 'alternative' measure of economic development has to be considered, consisting of a kind of weighted measure of the different dimensions of agency at the micro and the macro level. We will develop such a

measure, and see to what extent it deviates from established proxies of development – and what the consequences of such an alternative concept are.

4. An integrated approach to agency

The synthesis has the ambition to improve both the theoretical and the empirical underpinning of the connections between family systems, human capital formation, political participation and economic development. We are aware of the high level of interdisciplinary knowledge required as input for the project. In elaborating theory, the research team will build on ongoing discussions with experts. The task of the postdoc will be to organize such a dialogue, to translate the results into verifiable hypotheses and to help with the integration and dissemination of the results from the subprojects.

An iterative fine tuning of our hypotheses and our indicators is crucial, as we are dealing with the often uncharted terrain between processes at the micro (family) and macro (economy) levels, as well as with connections between politics, education and family. We anticipate three international and interdisciplinary workshops, in which we will discuss our hypotheses with peers. Thus, one workshop will be devoted to the economic impact of family systems and will bring together economic, demographic and family historians. Another workshop will deal with human capital, and its relationship with economic and political institutions. Finally, a workshop will be organized to discuss the economic impact of political participation. The postdoc will play an essential role in organizing these workshops and in translating their results in improved and testable concepts and models. He/she will, together with the applicants, be responsible for the publications of one or several edited volumes or special issues of journals with the outcomes of the workshops. Also, the postdoc will join the applicants in preparing the synthesis of the project.

The main challenge of this subproject is to elaborate the central concept of agency. As Hitlin and Elder (2007) have recently noted: 'Debates over the nature of agency remain quite abstract, and typically unrelated to empirical indicators'. The postdoc will specifically work on a multidimensional and gendered indicator of 'agency', which can be related to both demographic behaviour, political participation and economic performance. In doing so, he/she will take up the challenge formulated by Rao (1997) to bridge the gap between anthropology (and by extension, history), economy and demography.

Associated with this central task, is the harmonization of data used in the Ph D projects. This implies making sure that across the subprojects, among others, regional entities, periods, and occupational codes are standardized. He/she will supervise the proper description of sources, variables, and estimation techniques in metadata files. The standards for describing such newly created, global datasets are being developed in the context of the CLIO-INFRA project as well internally by the IISH (Doek et al 2010). Finally, the postdoc will play a role in the negotiations with external partners concerning data to be shared.

Summary in five key words

economic development, agency, gender, family system, human capital formation

work programme

- 1/1/2011: start Ph D projects: collection data (first year), analysis data and publication papers in major international journal (second and third year), finishing Ph D (fourth year)
- 1/9/2012 start postdoc project, collection data (first year), analysis data and publication papers in major international journal (second year), contributing to synthesis (third year)

- 1/12/2011, 1/12/2012, 1/12/2013 international, interdisciplinary workshops to discuss hypotheses regarding causation at micro and macro-levels. Organization by postdoc and applicants.
- 1/1/2014-31/12/2015 writing synthesis: based on papers Ph D students, conferences and additional research by postdoc and applicants

word count main text: 1856 words

Planned deliverables

Each Ph D student will publish two papers in internationally refereed journals, and a dissertation (in case we cannot find suitable candidates for these positions).

The postdoc will publish two papers in major international journals (second and third year).

The applicants and the postdoc will be responsible for the synthesis, which will be a book based on a series of articles on different aspects of the project preceded by an introduction summarizing the main results. This will be published by a major international publisher. All publications will be in English; at some point a popular version in Dutch of the research results may be considered.

As part of the 'kennisvalorisatie' a website will be created, linked to the CLIO INFRA website, which will present the main results of the project for a broader audience. This website will be launched at a (Dutch language) symposium where the main results of the project will be presented and discussed.

Brief CV Jan Luiten van Zanden

- currently professor of global economic history at Utrecht University (faculteitshoogleraar)
- 1985 Ph.D. at the Agricultural University of Wageningen on The Economic Development of Agriculture in the Netherlands in the Nineteenth Century
- 1987-1992 Professor in Economic and Social History at the Free University, Amsterdam
- 1994-1998 Director of the N.W. Posthumus Institute, Netherlands graduate school for economic and social history
- 1997- Member of the Royal Academy of Sciences
- 1998-2006 Secretary-General of the [International Economic History Association](#)
- 2001-2009 Senior Research Fellow at the IISH
- 2006- (Vice)-President of the International Economic History Association, and chair of the Local Organizing Committee of the XVth [World Economic History Congress](#), Utrecht 2009
- 2003: [Spinoza premium](#) by [NWO](#).

Key Publications

- *The Long Road to the Industrial Revolution. The European Economy in a Global Perspective, 1000-1800.* Brill Publishers, 2009.
- with Tine de Moor, 'Girlpower. The European Marriage Pattern (EMP) and Labour Markets in the North Sea Region in the Late Medieval and Early Modern Period', *Economic History Review*, 63 (2010) 1-33.
- with Eltjo Buringh, 'Charting the "Rise of the West": Manuscripts and Printed Books in Europe, a long-term perspective from the sixth through the eighteenth centuries', *Journal of Economic History*, 69 (2009) 409-445.
- with Joerg Baten, 'Book Production and the Onset of Modern Economic Growth' *Journal of Economic Growth*, 13 (2008) 217-235.

- 'The skill premium and the "Great Divergence"', *European Review of Economic History*, 13 (2009) 121-153.
- with Maarten Prak, 'Towards an economic interpretation of citizenship. The Dutch Republic between medieval communes and modern nation states', *European Review of Economic History* 10 (2006) 111-147.
- with A. van Riel, *The Structures of Inheritance. The Dutch Economy in the Nineteenth Century*. Princeton University Press, 2004.
- 'On the efficiency of markets for agricultural products. Rice prices and capital markets in 19th century Java', *Journal of Economic History*, 64 (2004) 1028-1055.

Summary for non-specialists

Leidt economische ontwikkeling tot meer 'agency' – tot een groter vermogen om het eigen lot in handen te nemen – en/of leidt meer 'agency' tot meer economische ontwikkeling? Dat er een wederzijds positief verband tussen deze twee 'variabelen' zou bestaan, en dat bovendien de agency van vrouwen daarin nog zwaarder weegt dan dat van mannen, is een van de fundamentele hypothesen van Nobelprijswinnaar Amartya Sen, en wordt nu breed uitgedragen in de literatuur over ontwikkelingsvraagstukken (o.a. betreffende women's empowerment). Voorgesteld wordt om deze verbanden in een historische lange termijn studie van deze ontwikkelingen op wereldschaal te onderzoeken. Het gaat daarbij om misschien wel de kernvraag van economische en sociaal-politieke ontwikkeling: bestaat er een nauw verband tussen 'vrijheid' en ontwikkeling, of is (om een recent voorbeeld te geven) het Chinese experiment, waarin een autoritaire staat snelle economische ontwikkeling op gang heeft gebracht, op den duur houdbaar? Er wordt gekeken naar agency op drie niveaus. Ten eerste het niveau van het huishouden: is het huwelijk gebaseerd op vrije keuze of wordt dit gearrangeerd? Ten tweede het macro-niveau van de staat: welke democratische rechten hebben mensen, en hoe ontwikkeld zich hun politieke participatie? Cruciale schakel in het verhaal is menselijk kapitaal/onderwijs, de derde vorm van agency die geanalyseerd gaat worden: hoe meer onderwijs men heeft genoten, des te beter is men in staat zelfstandig beslissingen te nemen. Tevens is volgens recente inzichten uit de sociale wetenschappen een bepaald niveau van menselijk kapitaal van belang te zijn voor democratische ontwikkeling (en/of de stabiliteit van democratieën). Tenslotte is menselijk kapitaal tevens het gevolg van investeringen op het micro-niveau, van huishoudens die een keuze tussen 'kwantiteit' en 'kwaliteit' van hun kinderen moeten maken (een keuzeproces dat vooral door het opleidingsniveau van vrouwen lijkt te worden bepaald). Bovendien zijn er aanwijzingen dat de manier waarop huishoudens georganiseerd zijn – autoritair of juist op onderhandelingen gericht – van grote invloed is op het macro-politieke niveau (de hypothese van Todd). Kortom, de variabelen die in dit programma centraal staan, hangen alle onderling sterk samen (zie het bijgevoegde schema). Een belangrijk deel van het onderzoek zal bestaan uit het aanleggen – grotendeels op basis van reeds gepubliceerde studies – van grote databestanden m.b.t. de genoemde dimensies van agency in de wereldeconomie, teneinde de ontwikkeling daarvan op de lange termijn te kunnen bestuderen, en de interacties met andere variabelen (zoals GDP per capita) te analyseren. Het project heeft een sterk interdisciplinair karakter: het combineert theorievorming en methoden uit verschillende vakgebieden (economie, sociologie, demografie en geschiedenis), en poogt door deze interdisciplinaire aanpak in belangrijke mate bij te dragen aan de inzichten in de interacties tussen de genoemde grootheden, teneinde beter te begrijpen waarom de westerse samenleving erin lijkt te slagen om 'vrijheid' en economische ontwikkeling met elkaar te combineren.

References

- A'Hearn, Brian, Baten, Joerg and Crayen, Dorothee (2009). 'Quantifying Quantitative Literacy: Age Heaping and the History of Human Capital,' *The Journal of Economic History*, vol. 69(03), pages 783-808.
- Acemoglu, Daron, S. Johnson and J. Robinson (2004), 'Institutions as the Fundamental Cause of Long-Run Growth' P.Aghion and S.N. Durlauf (eds), *Handbook of Economic Growth*, North-Holland, pp 385-473.
- Acemoglu, Daron, and James Robinson (2006) *Economic Origins of Dictatorship and Democracy*. Cambridge U.P..
- Angrist, Josh (2002), 'How Do Sex Ratios Affect Marriage and Labor Markets? Evidence from America's Second Generation', *Quarterly Journal of Economics* 117(3) August 997-1038.
- Bahle, T. (2008), 'Family policy patterns in the enlarged EU', in: J. Alner, T. Fahey and C. Saraceno (eds), *Handbook of Quality of Life in the Enlarged European Union*, London and New York, Routledge, 100-125.
- Becker, G.S. and H.H. Lewis (1973), 'On the Interaction between the Quantity and Quality of Children', *The Journal of Political Economy*, 81 (2) 279-288.
- Becker, S.O., F. Ciniella and L. Woessmann (2009), 'The Trade-off between Fertility and Education: Evidence from before the Demographic Transition' The Institute for the Study of Labor, Bonn. Discussion Paper No. 4557 November 2009.
- Bockstette, Valerie, Chanda Areendam and Louis Putterman (2002) 'State and Markets: The Advantage of an Early Start', *Journal of Economic Growth*, 7, 347-369.
- Branisa, B., S. Klasen and M.Ziegler (2009), Why we should all care about social institutions related to gender inequality. Discussion paper University of Goettingen October 2009.
- Brown, P.H. (2006), 'Parental education and investment in children's human capital in rural China', *Economic development & cultural change* 54 (4) 759-789.
- Crafts, Nicholas (2002) 'The Human Development Index, 1870 - 1999: Some revised estimates', *European Review of Economic History*6(03) 395-405.
- Doek, A. L.Heerma van Voss, K. Hofmeester, J. Kok and T. van der Werd-Davelaar (2010). IISH Guidelines for preserving research data: a framework for preserving collaborative data collections for future research.
- Durantón, G., A. Rodríguez-Pose and R. Sandall (2009), 'Family types and the persistence of regional disparities in Europe', *Economic Geography*, 85 (1) 23-47.
- Edlund, Lena Cecilia & Lagerlöf, Nils-Petter (2006), 'Individual vs. Parental Consent in Marriage: Implications for Intra-Household Resource Allocation and Growth', CEPR Discussion Papers 5474,
- Field, Erica and Attila Ambrus (2008) 'Early Marriage, Age of Menarche, and Female Schooling Attainment in Bangladesh', *Journal of Political Economy* 116 881-931.
- Galor, O. (2005), 'From stagnation to growth; unified growth theory', in: P.Aghion and S.N. Durlauf (eds), *Handbook of Economic Growth* Amsterdam, Elsevier, 171-293.
- Glaeser, E.L., La Porta, R., Lopez-de-Silanes, F. and Shleifer, A. (2004)', Do Institutions Cause Growth? *Journal of Economic Growth* (9) 271-303.
- Glaeser, E.L., G. Ponzetto and A. Shleifer (2007), 'Why does democracy need education?', *Journal of Economic Growth* (12) 77-99.
- Goldin, Claudia (1990), *Understanding the Gender Gap* New York, Oxford University Press.
- Hajnal, J. (1965) European marriage in perspective. In: Glass, D.V. and Eversley, D.E.C., (Eds.) *Population in history* London.
- Hajnal, J. (1982) Two kinds of preindustrial household formation system. *Population and development review* 8, 449-494.
- Hammel, E.A. (1990), 'A Theory of Culture for Demography', *Population and Development Review* (16) 455-485.
- Hitlin, S. and G. Elder,(2007), 'Agency: an empirical model of an abstract concept', *Advances in Life Course Research* 11, 33-67.
- Kalmijn, M. (2007), 'Explaining cross-national differences in marriage, cohabitation, and divorce in Europe, 1990-2000', *Population Studies* (61) 243-263.
- Lindert, Peter H.(2004), *Growing Public: Social Spending and Economic Growth Since the Eighteenth Century, Volume I: The Story* New York, Cambridge University Press.
- Keck, W. and A. Blome (2008), 'Is there a generational cleavage in Europe? Age-specific perceptions of elderly care and of the pension system', in J. Alner, T. Fahey and C. Saraceno (eds), *Handbook of Quality of Life in the Enlarged European Union*. London and New York, Routledge 72-99.
- Kick, E., B. Davis, M. Lehtinen and L. Wang (2000), 'Family and economic growth. A world-system approach and a cross-national analysis', *International Journal of Comparative Sociology* (41) 225-244.
- Lee, J., and C. Campbell (1997), *Fate and Fortune in Rural China: Social organization and Population Behavior in Liaoning, 1774-1873* Cambridge, Cambridge University Press.
- Leibenstein, H. (1981), 'Economic Decision Theory and Human Fertility Behavior: A Speculative Essay', *Population and Development Review* (7) 381-400.
- Mandemakers, K. (2006), 'Building life course datasets from population registers by the Historical sample of the Netherlands (HSN)', *History and Computing* (14) 87-107.

Mason, K.O. (2001). 'Gender and Family Systems in the Fertility Transition', *Population and Development Review*, Vol. 27, Supplement: Global Fertility Transition, 160-176.

Mokyr, J. and H.-J. Voth (forthcoming). 'Understanding growth in Europe, 1700-1870: theory and evidence', chapter in: S. Broadberry and K. O'Rourke, *Cambridge Economic History of Modern Europe*.

Moor, T. De, and Jan Luiten van Zanden (2010), 'Every woman counts', A gender-analysis of numeracy in the Low Countries during the Early modern period'. To be published by *Journal of Interdisciplinary History*.

Morrison, Christian and Fabrice Murtin (2008), 'The Century of Education' PSE Working Paper No. 2008-22.

North, Douglass C. (1981) *Structure and change in economic history* New York, Norton.

North, D.C. and Weingast, B.W. (1989). 'The Evolution of Institutions Governing Public Choice in seventeenth century England.' *Journal of Economic History* 49, 803-32.

North, D.C., J.J. Wallis and B.R. Weingast (2009) *Violence and Social Orders*. Cambridge U.P.

Praz, A.F. (2009), 'Religion, masculinity and fertility decline. A comparative analysis of Protestant and Catholic culture (Switzerland 1890–1930)', *History of the Family. An International Quarterly* (13) 88-106.

Praz, A.F. (2006), 'State institutions as mediators between religion and fertility. A comparison of two Swiss regions (1860–1930)' in: Renzo Derozas and Frans van Poppel (eds.), *Religion and the Decline of Fertility* Dordrecht, Springer 104-132.

Rao, V. (1997), 'Can Economics Mediate the Relationship between Anthropology and Demography?', *Population and Development Review* 23, 833-838.

Reher, D. S. (1998). "'Family ties in Western Europe: Persistent Contrasts', *Population and Development Review* (24) 203–234.

Schultz, T. Paul (1997), 'Demand for children in low income countries', in M. R. Rosenzweig and O. Stark, (eds), *Handbook of Population and Family Economics*, Elsevier 349-430.

Sen, Amartya (1999), *Development as Freedom*. Oxford, Oxford UP.

Therborn, G. (2004), *Between sex and power. Family in the world, 1900-2000*. London and New York, Routledge.

Todd, E. (1985), *The Explanation of Ideology. Family Structures and Social System* Oxford, Basil Blackwell.

Todd, E. (1987), *The causes of progress: culture, authority and change* Oxford, Basil Blackwell.

Todd, E. (1990), *L'Invention de l'Europe*, Paris, Seuil.

Tsuya, N.O., F. Wang, G. Alter and J.Z. Lee (2010), *Prudence and Pressure. Reproduction and Human Agency in Europe and Asia 1700-1900*, Cambridge Mass, MIT Press.

Verdon, M. (1998), *Rethinking Households: An Atomistic Perspective on European Living Arrangements*, London.

Zanden, J.L. van (2009), *The Long Road to the Industrial Revolution. The European Economy in a Global Perspective 1000-1800* Leiden, Brill Publishers.