## **Foreword**

This book is based on a set of papers from a long lasting project that has led to a total of 12 papers listed in Table 1. After a dozen years of work, I needed to take stock and put everything together. Once started, I came to rewrite, reorganize, update and extend almost everything.

I stand as the sole author of the book, so I have to use first person. However, it is a boast for which I want to apologize. Ten of the 'underlying' papers are joint work. No less than eight of the papers are co-authored by professor *Erich Gundlach* (EG) from the University of Hamburg. I tried very hard to convince him to be co-author to the book, but he had involved himself in too many other duties. I shall not try to sort out what ideas are his – after such a long cooperation it would be impossible. Two of the papers had another coauthor: My colleague professor *Christian Bjørnskov* (CB), with whom I often discuss, and my daughter *Ella Paldam* (EP), who is post doc at the Interactive Minds Center at Aarhus University. I am grateful to both of them for many fine discussions and good ideas. I also want to thank *Birgitte Højklint Nielsen*, who has been my eagle eyed in-house editor.

Table 1. The 12 papers. Column 2 is the co-author

<sup>1</sup> EG 2008 Two Views on Institutions and Development: The Grand Transition vs the Primacy of Institutions. *Kyklos* 61, 65-100

<sup>2</sup> EG 2009 A farewell to critical junctures. Sorting out the long-run causality of income and democracy. *European Journal of Political Economy* 25, 340-54

<sup>3</sup> EG 2009 The transition of corruption: From poverty to honesty. Economic Letters 103, 146-48

<sup>4</sup> EG 2012 The democratic transition: Short-run and long-run causality between income and the Gastil Index. European Journal of Development Research 24, 144-68

<sup>5</sup> CB 2012 The spirits of capitalism and socialism. A cross-country study of ideology. Public Choice 150, 469-98

<sup>6</sup> EG 2012 A model of the religious transition. Theoretical Economic Letters, 419-22

<sup>7</sup> EG 2013 The religious transition. A long run perspective. Public Choice 156, 105-23

<sup>8</sup> EP 2017 The political economy of churches in Denmark, 1300-2015. Public Choice 172, 443-63

<sup>9</sup> EG 2018 Jumps into democracy. Integrating the short and the long run in the Democratic Transition. *Kyklos* 7, 456-81

<sup>10 2020</sup> A study of triggering events. When do political regimes change? *Public Choice* 182, 181-99

<sup>11 2020</sup> The transition of corruption. Institutions and dynamics. *European Journal of Political Economy*, online first: https://doi.org/10.1016/j.ejpoleco.2020.101952

<sup>12</sup> EG 2020 A hump-shaped transitional growth path as a general pattern of long-run development. *Economic Systems* 44(3), article 10825

The papers have been presented at guest lectures at a dozen universities, and at various conferences, notably at the annual meeting of the European Public Choice Society. The papers have consequently benefitted from comments from many colleagues and friends at the EPCS and elsewhere. They have also been through refereeing, often receiving useful comments. The same applies to the two readers of the first version of the book assigned by the publisher and my very encouraging editor Robert Dreesen.

At the late stages in the process, it became rather difficult to write new papers as I was carrying all the previous papers on my back. I could not demonstrate everything once again without self-plagiarizing, and it is bad taste to keep referring to yourself. From now on I will have the great advantage of needing only one self-reference.

Finally, I may as well admit, what the reader will soon discover. I am a low-brow empirical economist. I love to spend my days trying to make sense of datasets, and I have done so for half a century. This book is not meant to advance neither econometrics nor theory-building, but to advance our understanding of a key aspect of the development in the world – this is more than enough for a project.

## A quick introduction to variables, data, country names

The book uses a limited set of variables, of which six are the most important. They come in various transformations. I have tried to make the notation as simple and consistent as possible, but the reader may still have some trouble keeping track. Table 2 should help the reader in this endeavor. It lists all variables including transformations, and the key terminology used in the book. I do not expect the reader to learn the table by heart, but it is useful to look through and to tag the page for easy reference. Table 2 gives all variables, but the chapters will repeat the relevant part of the table. The six most important variables are:

Large datasets of thousands of observations exists for four level variables, y, P, F and T. They are y income, and three institutional indices; P, the Polity2 Index used to measure the political system; F, the Fraser index of economic freedom used to measure the economic system, and T, the Transparency International corruption index. While y has no known bounds, P, F and T are bounded. The first differences to y, P and F are growth, g, dP and dF.

The World Values surveys has given two level variables, B and R. Since each poll gives one observation only, they are covered by much smaller datasets: They are B the ownership index and R the religiosity index.

All data used are downloaded from the net, and I give the net address in Table 2. These addresses may move, the data may be revised, etc., but they are the ones used. They were all

assessed in the Fall of 2019, and to make sure everything can be replicated, the data used for the project are all available at the home page: *http://www.martin.paldam.dk/GT-Book-Data*. They are in Excel (.xlsx) format.

Table 2a. Terminology and variables used in book for easy reference

	<b>Transition terminology</b> , for a level variable $X = y$ , $P$ , $CL$ , $PR$ , $B$ , $F$ , $T$ or $R$ .	
	<i>I steady state.</i> All countries in 1750 and low-income countries (LICs) until recently.	
Modern ste	eady state. High-income countries today (HICs), with the OPEC exception.	
Grand tran	asition. The path that connects a low-level divergence and a high-level convergence.	
$X_{it}$	<i>Panel</i> representation of the variable, for country $i = 1, n$ and time $t = 1, k$ .	
$X_j$	<i>Unified</i> representation, <i>j</i> is the order of the data. Divided in <i>Main</i> and <i>OPEC</i> sample.	
$\Pi^X(y_j)$	Transition curve. Gives the net change in X, necessary for the transition. A transition	
	as termed <i>beautiful</i> if the best kernel-estimate has the properties listed in Table 2.2.	
$\lambda^X$	<i>Slope</i> of transition curve, $\lambda^X = \partial \Pi^X/\partial y$ . It is either $\leq$ or $\geq$ for the full <i>y</i> -range.	
$K^X(y_j, bw)$	<i>Kernel</i> estimate of transition, <i>bw</i> is bandwidth. $K^{X}(y_{j}, bw) \approx \Pi^{X}(y_{j})$ .	
dX	Average numerical change in $X$ for either all countries, $i$ , or all years, $t$ .	
$G^X$ -ratio	Excess movements in X. The gross movements in X relative to the net change.	
	Other terms. Mainly used in Chapters 8 and 9.	
Welfare goods are goods with large positive externalities. The three big ones are education,		
	healthcare and social protection. Others are infrastructure, law and order, etc.	
A mixed sv	stem has a large public role in the production of welfare goods, and a small role in	
J	the production of other goods. Trade, agriculture, industry and finance are private.	
	Data samples for all countries and years are divided in two.	
Main	Data for countries that has never been an OPEC member.	
OPEC	Member, present or past, of the Organization of the Petroleum Exporting Countries.	
a	National accounts variables. Used in all chapters.	
Source	Maddison Project: https://www.rug.nl/ggdc/historicaldevelopment/maddison/.	
GDP	Gross Domestic Product, in fixed PPP, purchasing power parity, prices.	
gdp	GDP per capita. The <i>cgdppc</i> series. The <i>rgdpnapc</i> series is almost equally good.	
У	<i>Income</i> , the natural logarithm to <i>gdp</i> . One lp-point is a <i>gdp</i> change of 2.7 times.	
g	Growth of gdp. $\Pi$ 's-curve is hump-shaped. Is a first difference transition curve.	
a	Political system (1) P-index. Polity (a) Chapters 4, 5, 7, 8 and 13.	
Source	Institute for Systemic Peace: https://www.systemicpeace.org/polityproject.html.	
P	P-index, integer [-10, 10] from authoritarian to democratic. $P = 0$ for no system.	
	Transition is 12-14 <i>P</i> -points, $\Pi^P$ -curve is beautiful and $\lambda^P \ge 0$ .	
dP	Average annual numerical change in <i>P</i> .	
zР	Fraction of years with $P = 0$ , i.e. anarchy or temporary foreign domination.	
_	Variables and functions derived from P-index. Chapters 2, 4, 5 and 7.	
$\mathit{\Theta}^{P}$	<i>Tension</i> , distance from <i>P</i> to transition path, i.e., $\Theta^P = P - \Pi(y)$ .	
	The country has too much or too little P if $\Theta^P > 0$ or $\Theta^P < 0$ respectively.	
E	<i>Event</i> , binary variable for year t. If P changes $E = 1$ . If P is constant $E = 0$ .	
	<i>Triggering event</i> , the change of system to a new system, which is not zero.	
J	<i>Jump</i> is a change, $P - P_{-1}$ . <i>Large</i> if $ \Delta P  > 3$ . Jumps Model explains larger jumps	
	Sequences are P changes in the same direction in consecutive years, incl. zero.	
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Table 2b. Variables used in book. For easy reference

	Political system (2) CL-index and (3) PR-index. Chapter 4
Source	Freedom House: https://freedomhouse.org/.
CL	Civil Liberties index, integer [7, 1], seven for lowest and 1 for highest.
	Transition is 3.5 <i>CL</i> -points. $\Pi^{CL}$ -curve is beautiful and $\lambda^{CL} < 0$ .
PR	Political Rights index, same scale as CL.
	Transition is 3.5 PR-points. $\Pi^{PR}$ -curve is beautiful and $\lambda^{PR} < 0$ .
	Economic System B-index (1). Chapter 8.
Source	World Values Surveys: http://www.worldvaluessurvey.org/wvs.jsp.
B	Ownership index. Excess preferences for private business in pp, percentage points.
	Transition is 18-20 <i>B</i> -pp. $\Pi^B$ -curve is almost linear, $\lambda^B \ge 0$ .
	Economic System F-index (2). Chapter 9 and 13.
Source	Fraser Institute: https://www.fraserinstitute.org/studies/economic-freedom.
F	F-index (b), [0, 10] two decimals. The Economic Freedom Index
	Transition is 2.8 <i>F</i> -points. $\Pi^F$ -curve is linear, $\lambda^F \ge 0$ .
dF	Average annual numerical change in <i>F</i> .
	Corruption T-index Chapter 10.(d)
Source	Transparency International: https://www.transparency.org/.
T	The <i>T</i> -index [0, 10] for corruption to honesty. It rises when corruption falls.
$\mathbf{\Theta}^T$	The deviation of the <i>T</i> -index from the transition path: $\Theta^T = T - \Pi^T$ .
	Transition is 6.5 <i>T</i> -points. $\Pi^T$ -curve is beautiful and $\lambda^T \ge 0$ .
	Religiosity R- index. Chapter 11.
Source	World Values Surveys: http://www.worldvaluessurvey.org/wvs.jsp.
R	Religiosity index in percentage points. Factor one in factor analysis of 14 religiosity
	items. The transition is 50 <i>R</i> -points. $\Pi^R$ -curve is almost linear, $\lambda^R \ge 0$ .
	Religiosity s-proxy (church density). Chapter 11.
Source	Own compilation from several sources; see (8) in Table 1.
S, s	Supply of churches data. The stock of churches, and per capita church density.
<i>D</i> , <i>d</i>	Demand for churches unobserved. Aggregate and demand per capita.
κ	Capacity utilization, relative to stock: $S_t = D_t(1 + \kappa)$ , in equilibrium $S_t^* = D_t$ .
$d \approx aR$	The relation between the two measures of religiosity, <i>a</i> may be constant.

Notes: (a) The Polity2 coding is used: Negative values [-10, -1] are authoritarian systems, and positive values [1, 10] are democratic systems. Zero is used for anarchy and for temporary foreign domination/occupation. (b) Index of the freedom to run a private business. It aggregate indicators for small public sector, law and order, stable money, free trade and few regulations. (d) Chapter 12 discusses two-sector models. Here *T* is used for the traditional sector.

One of the data-pages is a list of countries and country groups. Though the country groups are based on the Word Bank classification, it sometimes change. For example, the group of socialist/post-socialist countries was important from 1960 to 2010, but it is becoming increasingly irrelevant. Country names may change. They sometimes merge or split. I use the shortest and most common name. That is, I use *Bolivia* for the Plurinational state of Bolivia, *Taiwan* for The Republic of China, etc. The two Congo's have both changed name several times. They are termed *Congo Br* and *Congo Ki* for the first two letters of their capital cities. I think that

*Myanmar* is now established for Burma, but that Eswatini is not yet established for *Swaziland*. In none of these cases I try to make a statement.

The book is mainly empirical – trying to point to main lines in development, and to explain why they occur, but there is no reason to hide that I prefers democracy, honesty and the modern mixed economy to dictatorship, corruption and central planning or the laisse faire.

I have tried to make the book accessible to both economists and political scientists. Also, to those, who are not fully read up. Thus, there are some sections to refresh the reader, which other readers may find trivial. A few paragraphs, cover more advanced stuff. I have tried to keep such paragraphs together in a section and added a warning in the headline.

Chapters are divided in sections. Thus, Chapter 3.7 is section 7 (s7) of Chapter 3. However, within Chapter 3 a reference to section (s7) or Table 5 are written with one digit. All chapters start with a small introduction that introduces the main content.