



Country-level Determinants of e-Government Maturity

LH 4640	London/Heathrow	1910	A	142
LH 3832	Bologna -Neapel	1910	A	142
LH 5384	Wien	1910	A	142
LH 5686	Turin	1910	A	142
LH 5366	Gent	1910	B	146
LH 5594	Firenz	1910	A	142
LH 882	Dresden	1910	A	733
LH 3864	Mailand/Malpensa	1910	A	733
LH 1747	Stuttgart	1915	A	733
LH 5248	Göteborg	1915	B	CRJ
LH 5012	Lyon	1915	A	CRJ
LH 893	Hannover	1915	A	733
LH 933	Köln/Bonn	1915	A	320
LH 3046	Stockholm/ARN	1915	B	733
LH 2205	Berlin/Tegel	1915	A	733
LH 4312	Madrid	1920	A	733
LH 3818	Ram	1920	A	733
LH 3456	Istanbul	1920	B	319
LH 4308	Barcelona	1920	A	733
LH 3420	Athen	1920	A	320
LH 857	Hamburg	1925	A	320
LH 879	Düsseldorf	1925	A	733
EN 2689	Triest	1930	A	AT5
SN 2648	Brüssel	1930	D	735
EN 2697	Verona	1935	A	AT5
EN 2667	Venedig	1935	A	AT5
MS 688	Kairo	1935	C	320
FC 607	Erfurt	1935	A	D38
SK 654	Kopenhagen	1935	B	M80
EN 2687	Lissabon	1945	A	AT3
EN 2677	Lissabon	1945	A	AT3
EN 2705	Mailand/Bergamo	1945	A	AT3
EAE 108	Frankfurt/Main	1945	A	733
EN 9193	Berlin/Tegel	1945	A	733
LH 244	Berlin/Tegel	1945	A	733
DI 7114	Hamburg	1955	D	733
LH 273	Frankfurt/Main	1955	A	AB6
DI 4609	Berlin/Tegel	1955	D	733

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1st pre-ICIS e-Government Workshop
Dec 12 2004, Washington, D.C.



Introduction

Observation:

Many affluent countries in e-Government rankings

Research Question:

- *Why has e-Government maturity come so far mainly to more affluent nations?*

Hypothesis:

- High GDP → therefore, able to afford high investment in IT, but possibly other factors too? e.g. human capital, governance



Background

e-Government- existing research

- Stream 1: qualitative focus
 - Goal: to guide other govts carrying out similar programmes
 - Do *not* compare success across programmes
 - Devadoss, et al. (2002), Ke & Wei (2004), Golden et al. (2003)
- Stream 2: quantitative focus
 - Use various criteria to assess e-Govt performance and compare across countries
 - E.g. frequency of interaction with govt, ease of carrying out tasks online
 - Different measures b'cos different conceptualizations of eGovt



e-Government Maturity

Defined as the level to which a government has developed an online presence

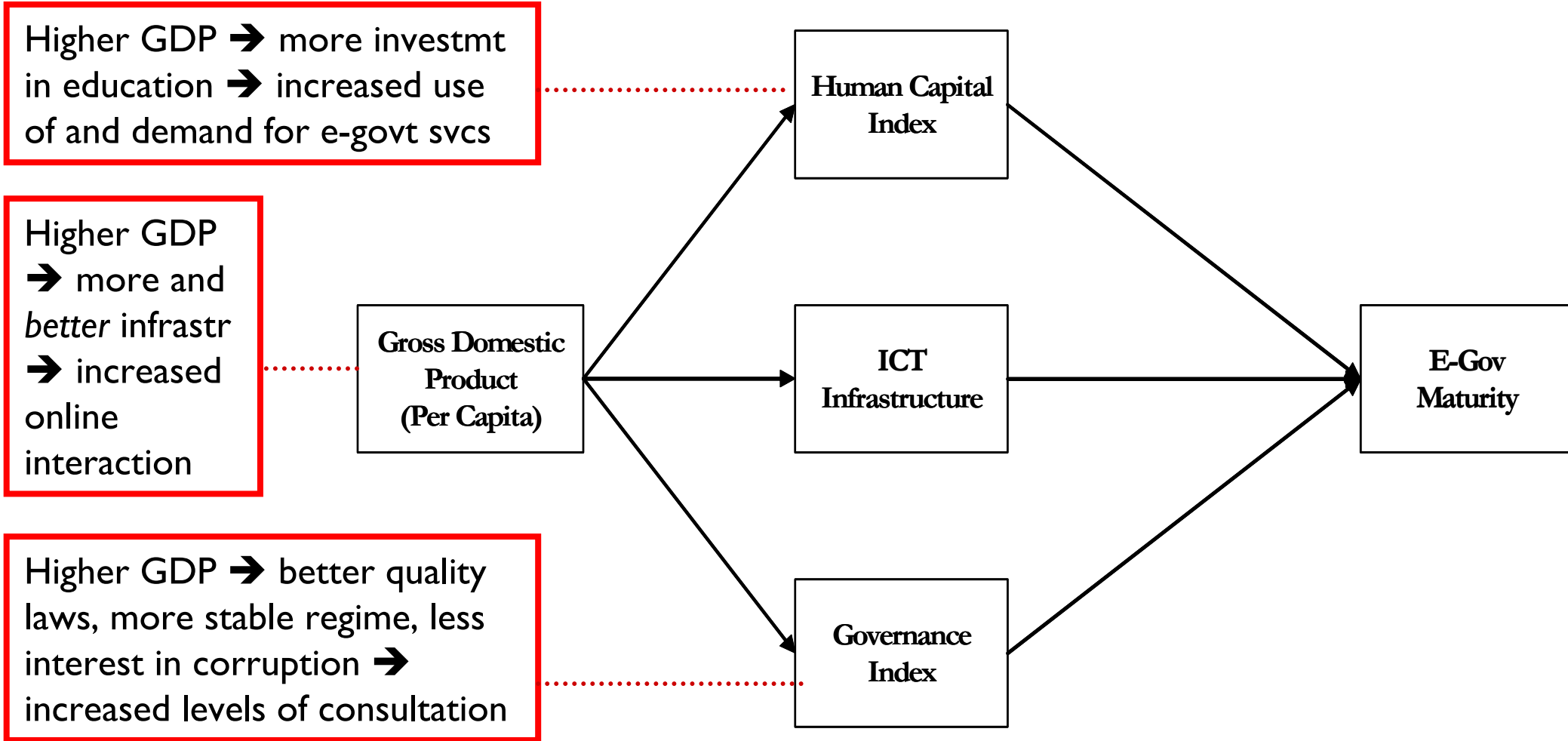
- The measure of concern in this study
- Different lens for understanding “success”

Emphasis on ***demonstrated behavior***

- As opposed to other measures that assess e-Government *potential* or *capacity*, but not implementation success
- Continuum of development- more advanced features + increasing ease for citizens to interact online
- Delivering online services requires integrating internal operations across functions



Research Model





Measures & Data I

■ Human Capital:

- UN Development Report's "education index": adult literacy rate & gross enrolment ratio in all schools in a country

■ ICT Infrastructure:

- UN's World Public Sector Report 2003: 6 components: no. of PCs, phone lines, mobile phones, & TVs per 1000 pp; no. of Internet users, online population per 1000 pp

■ Governance:

- Kaufmann, et al., 2003: aggregate more than 200 variables from 25 data sources; 6 dimensions: Voice & Accountability, Pol'l Stability, Govt Effectiveness, Regulatory Quality, Rule of Law, Control of Corruption



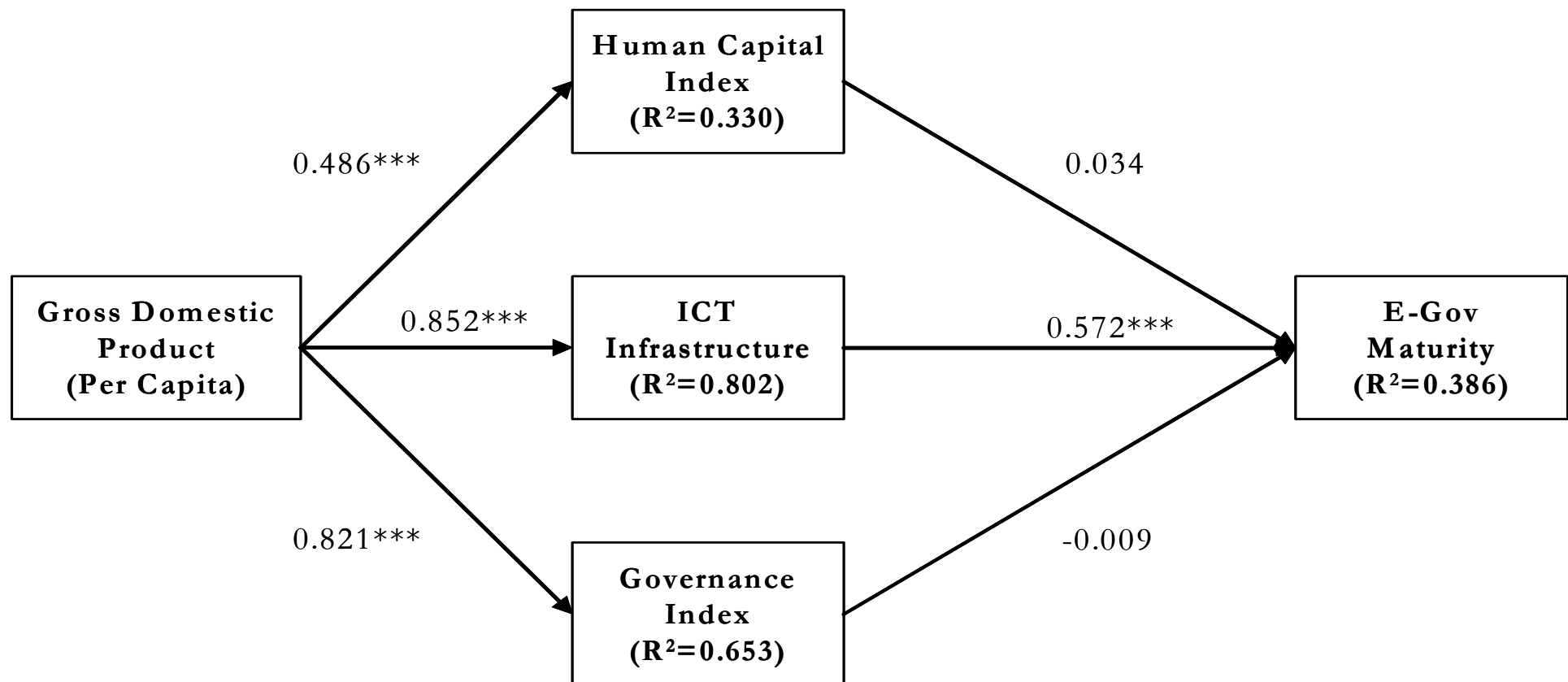
Measures & Data 2

- **eGovt Maturity: West, 2003**
 - Examined 2,166 government websites from 198 countries
 - measures what has been achieved in terms of online service delivery
- **Comparison with Layne & Lee (2001):**
 - Catalogue → Transctn → Vert Integrtn → Horiz Integrtn
 - West's measure covers similar concepts: e.g. availability of info, ability to make payments, no. of online services available, disabled access



Analysis and Results

Use a partial least squares (PLS) approach: combines path analysis and regression to assess the fit of data to a theoretical model





Discussion

Partial support for our theorized model:

- Only technological infrastructure plays a mediating role

So, story is:

- affluent nations have better infrastructure, so they attain higher maturity in e-Government.
- Human capital and the quality of governance are both positively associated with per capita GDP (as expected), but fail to have significant impact on e-Government maturity

Why these results?



Conclusion

Possible explanations for:

- ICT's mediating role-
 - e-Govt currently constrained by the newness of IT, so govts that can afford it receive the benefits; as IT becomes more commonplace, its mediating influence might decline
- human capital and governance insignificant as mediators-
 - eGovt's focus now on service delivery, not participation; as focus shifts, human capital and governance might become more significant influences

Other findings: Possible to reach e-Govt maturity without necessarily advancing in human capital and governance