



UNIVERSITY OF
GOTHENBURG

CORRELATES OF DEMOCRACY

SÖREN HOLMBERG

BO ROTHSTEIN

WORKING PAPER SERIES 2011:10

QOG THE QUALITY OF GOVERNMENT INSTITUTE

Department of Political Science

University of Gothenburg

Box 711, SE 405 30 GÖTEBORG

October 2011

ISSN 1653-8919

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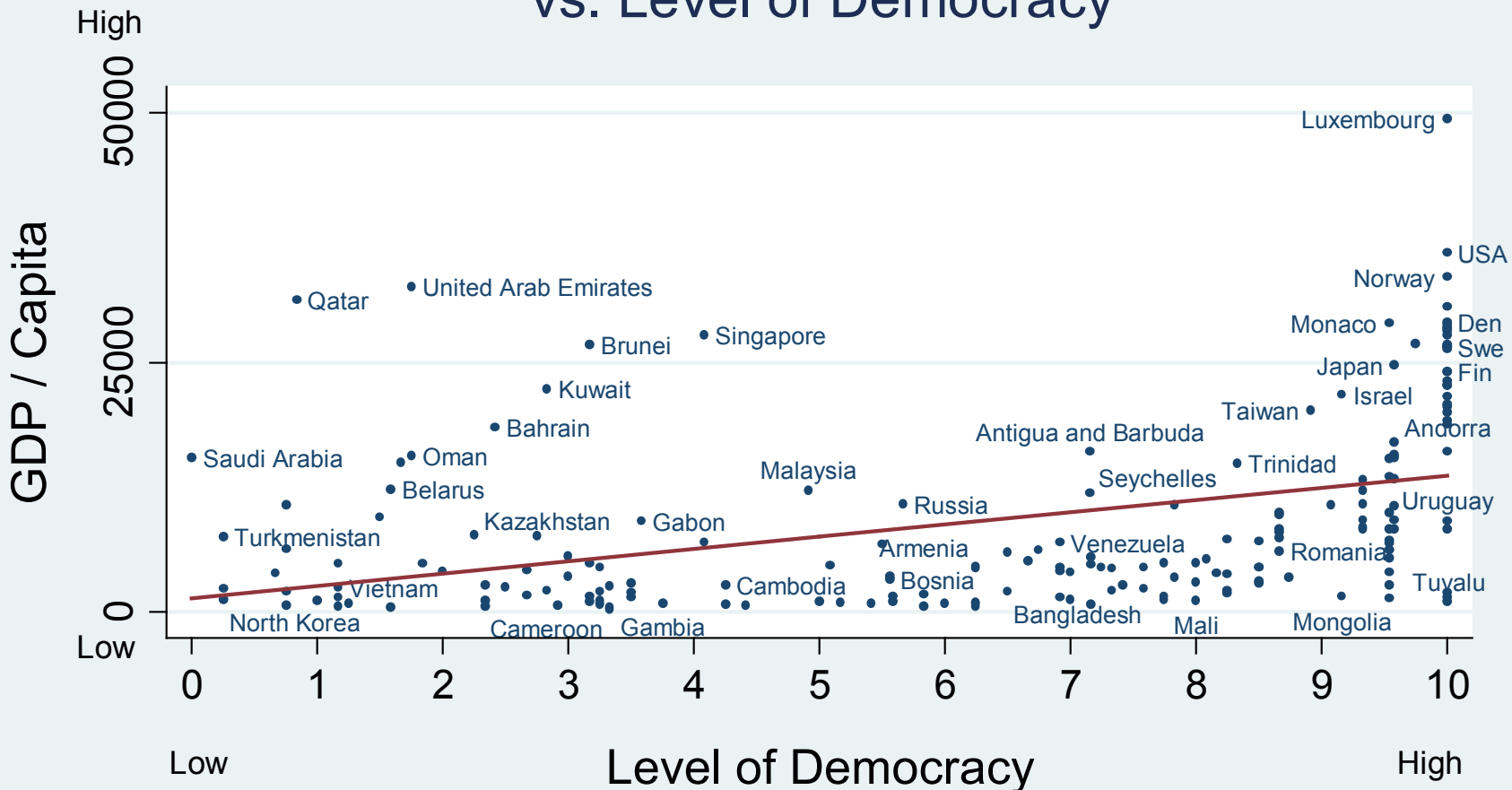
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GDP / Capita vs. Level of Democracy

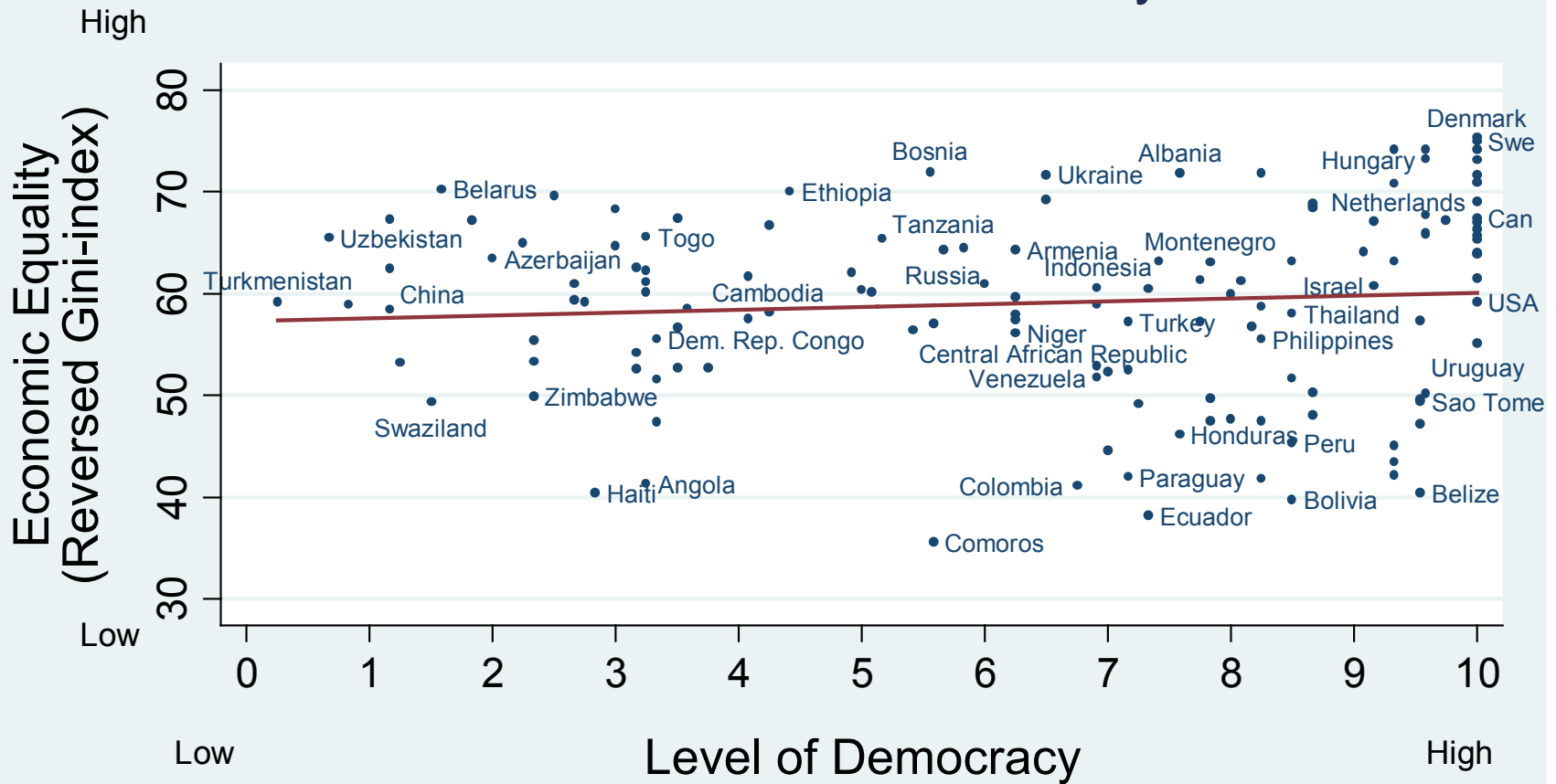


R²=0.16

Sources: Gleditsch (2002), Freedom House/Polity (2002-2006)

Data runs by: Richard Svensson

Economic Equality vs. Level of Democracy

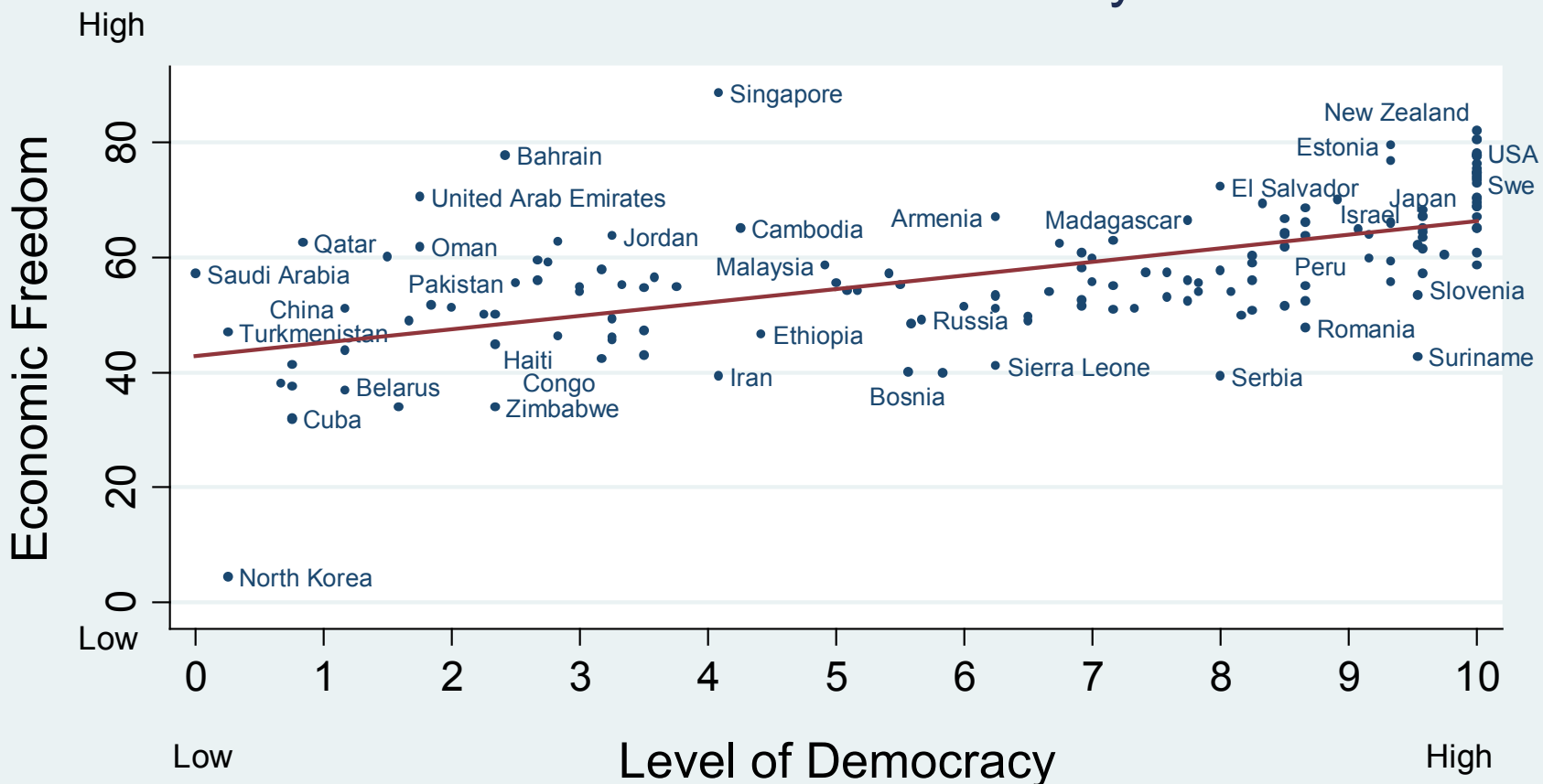


R²=0.01

Sources: World Development Indicators (1995-2008), Freedom House/Polity (2002-2006)

Data runs by: Richard Svensson

Economic Freedom vs. Level of Democracy

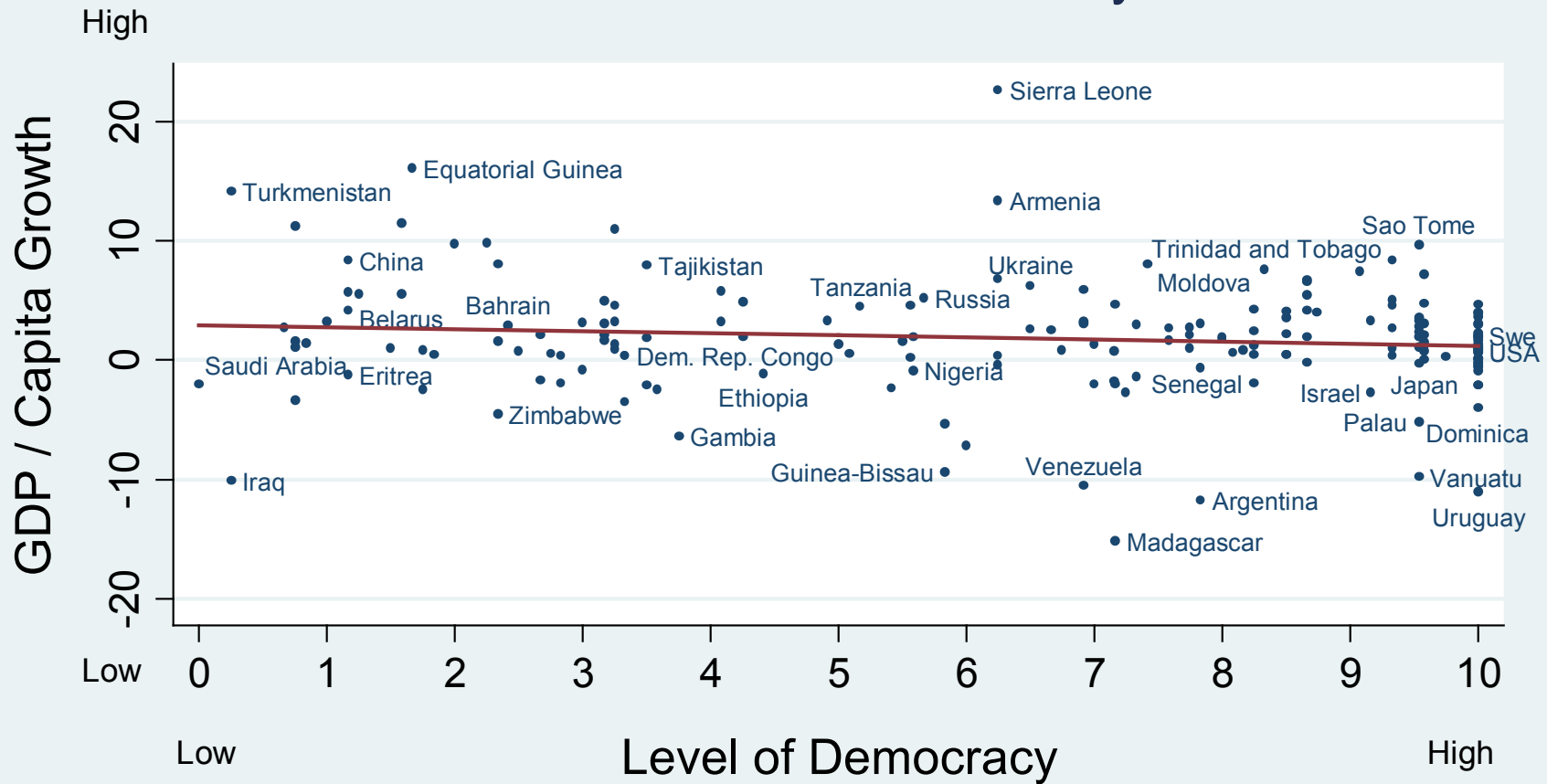


R²=0.37

Sources: Heritage Foundation (2002), Freedom House/Polity (2002-2006)

Data runs by: Richard Svensson

GDP / Capita Growth vs. Level of Democracy



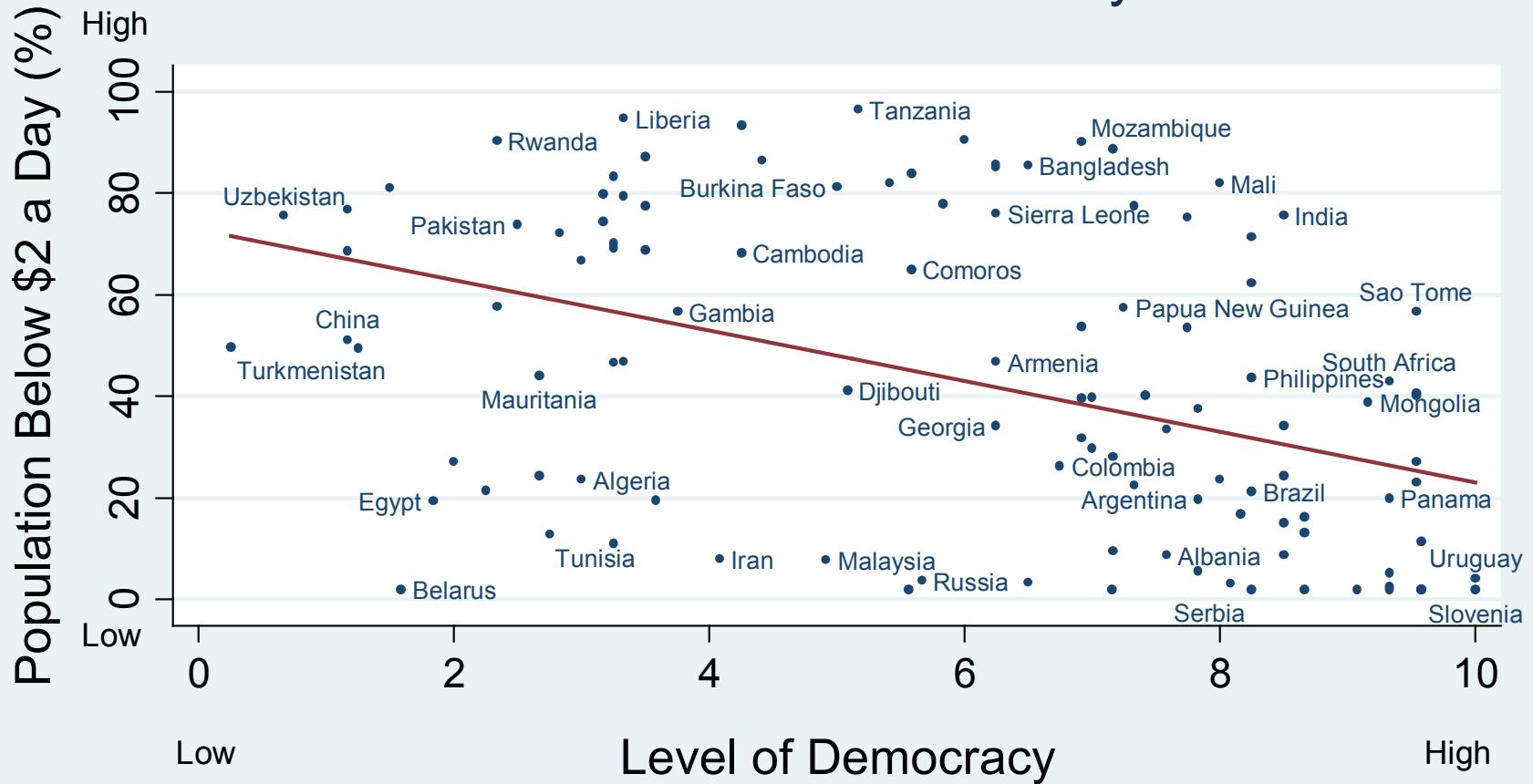
R²=0.01

Sources: World Development Indicators (2002-2005), Freedom House/Polity (2002-2006)

(N.B. The data for GDP / Capita growth is for a single year only)

Data runs by: Richard Svensson

Population Below \$2 a Day vs. Level of Democracy

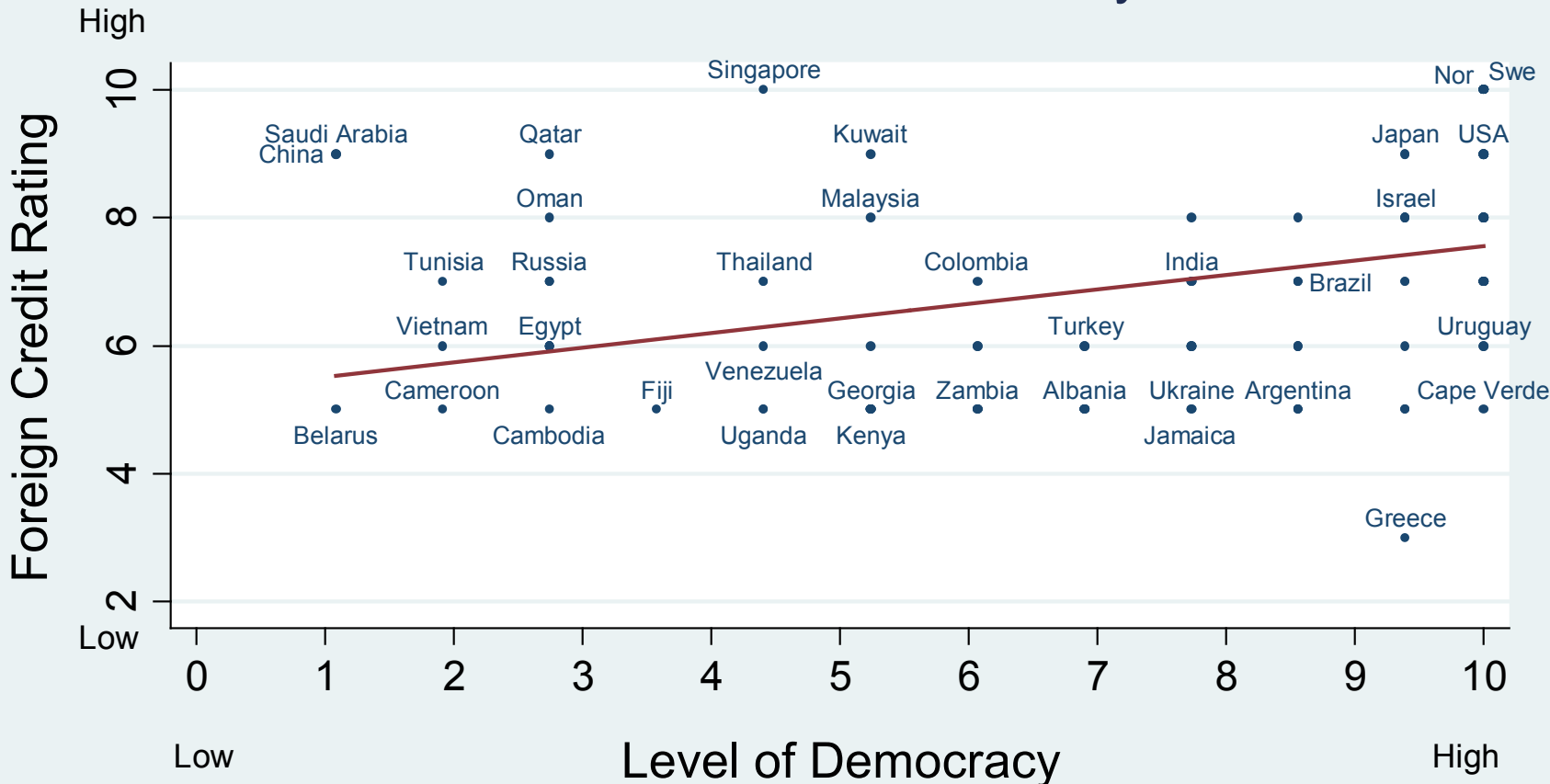


R²=0.19

Sources: World Bank (1995-2007), Freedom House/Polity (2002-2006)

Data runs by: Richard Svensson

Foreign Credit Rating vs. Level of Democracy

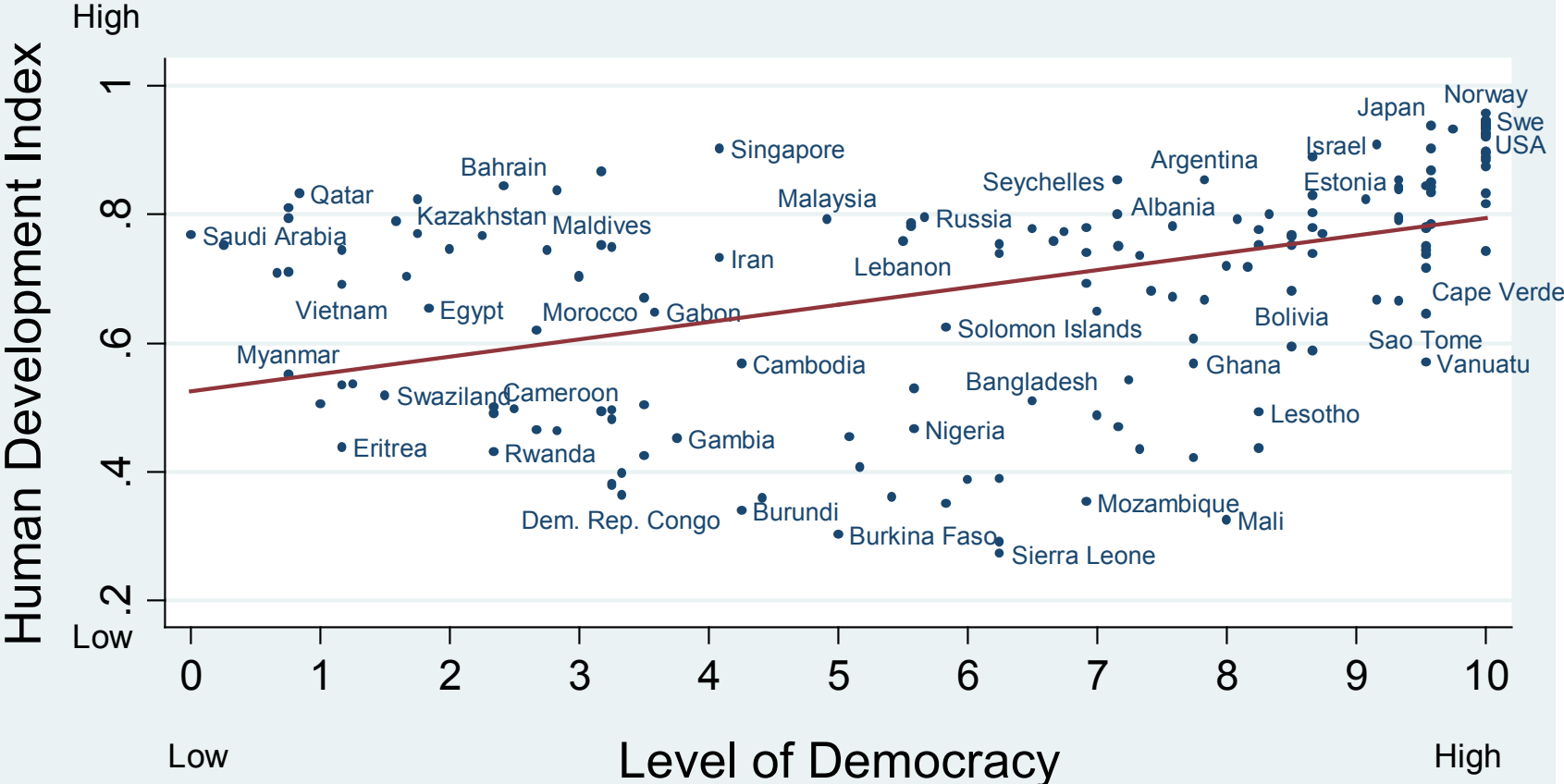


R²=0.13

Sources: Standard & Poor's (2011), Freedom House/Polity (2009)

Data runs by: Richard Svensson

Human Development Index vs. Level of Democracy

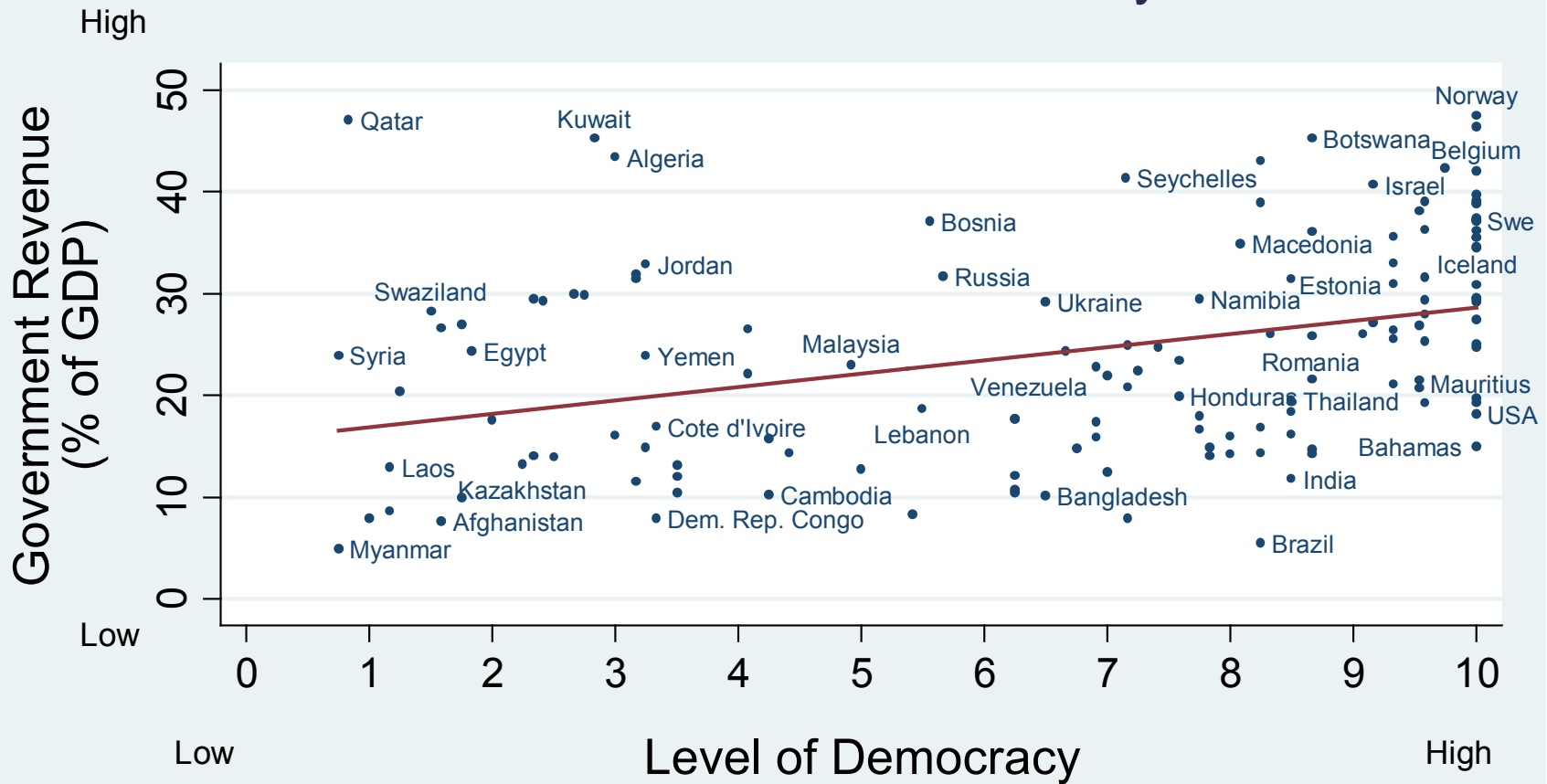


R²=0.22

Sources: UNDP (2002), Freedom House/Polity (2002-2006)

Data runs by: Richard Svensson

Government Revenue vs. Level of Democracy

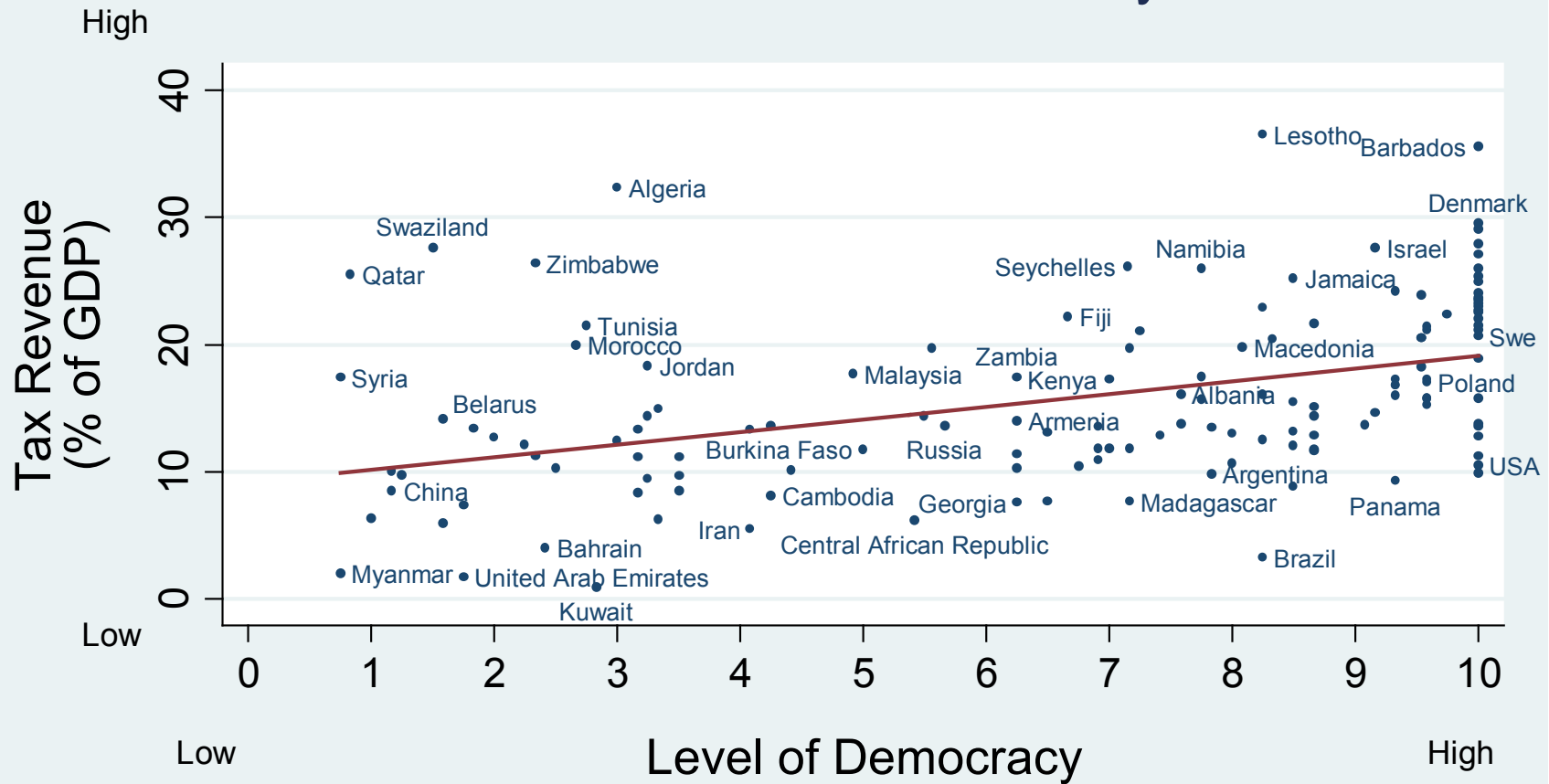


$R^2=0.14$

Sources: World Development Indicators (1996-2008), Freedom House/Polity (2002-2006)

Data runs by: Richard Svensson

Tax Revenue vs. Level of Democracy

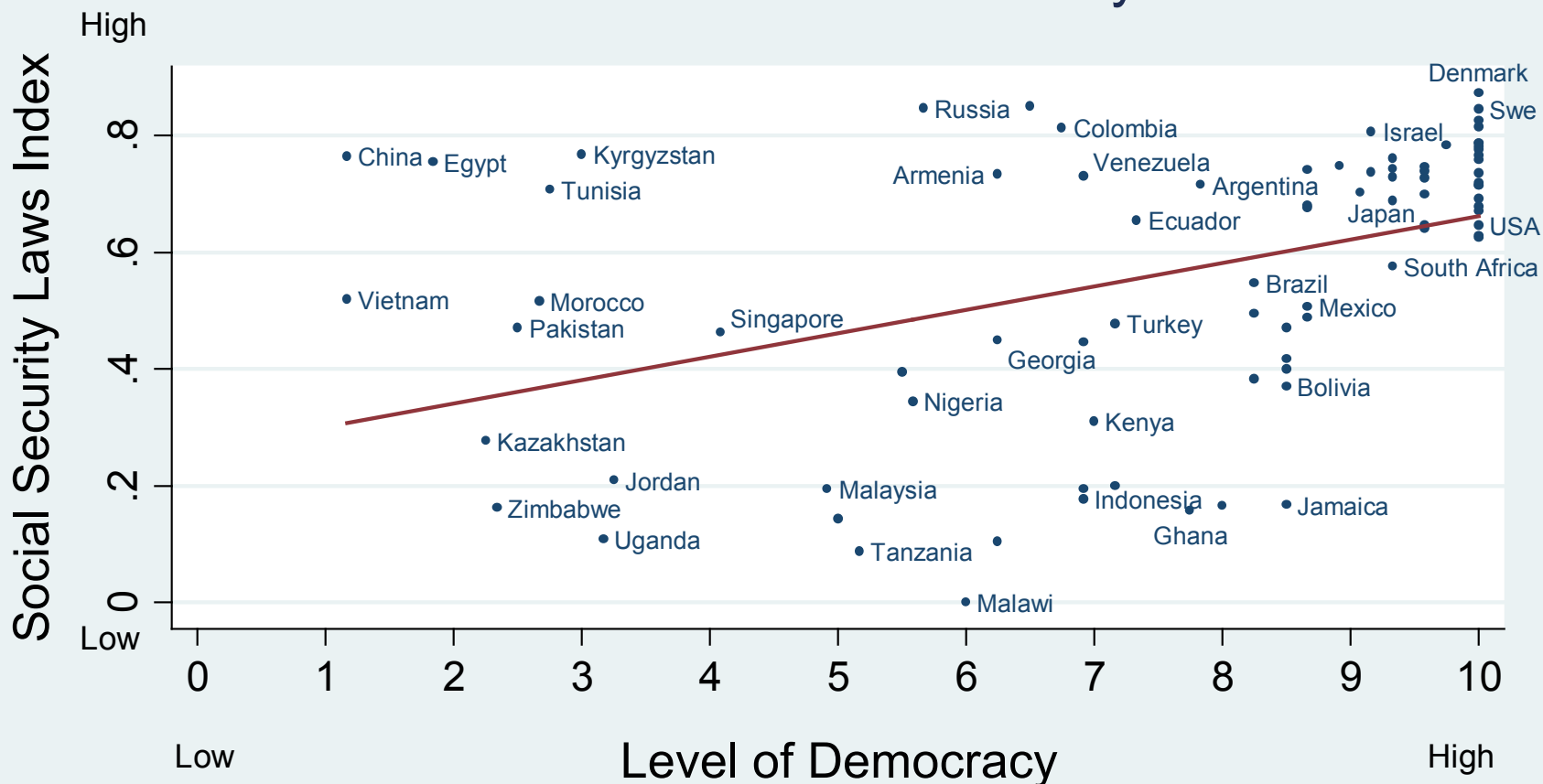


R²=0.19

Sources: World Development Indicators (1996-2008), Freedom House/Polity (2002-2006)

Data runs by: Richard Svensson

Social Security Laws Index vs. Level of Democracy

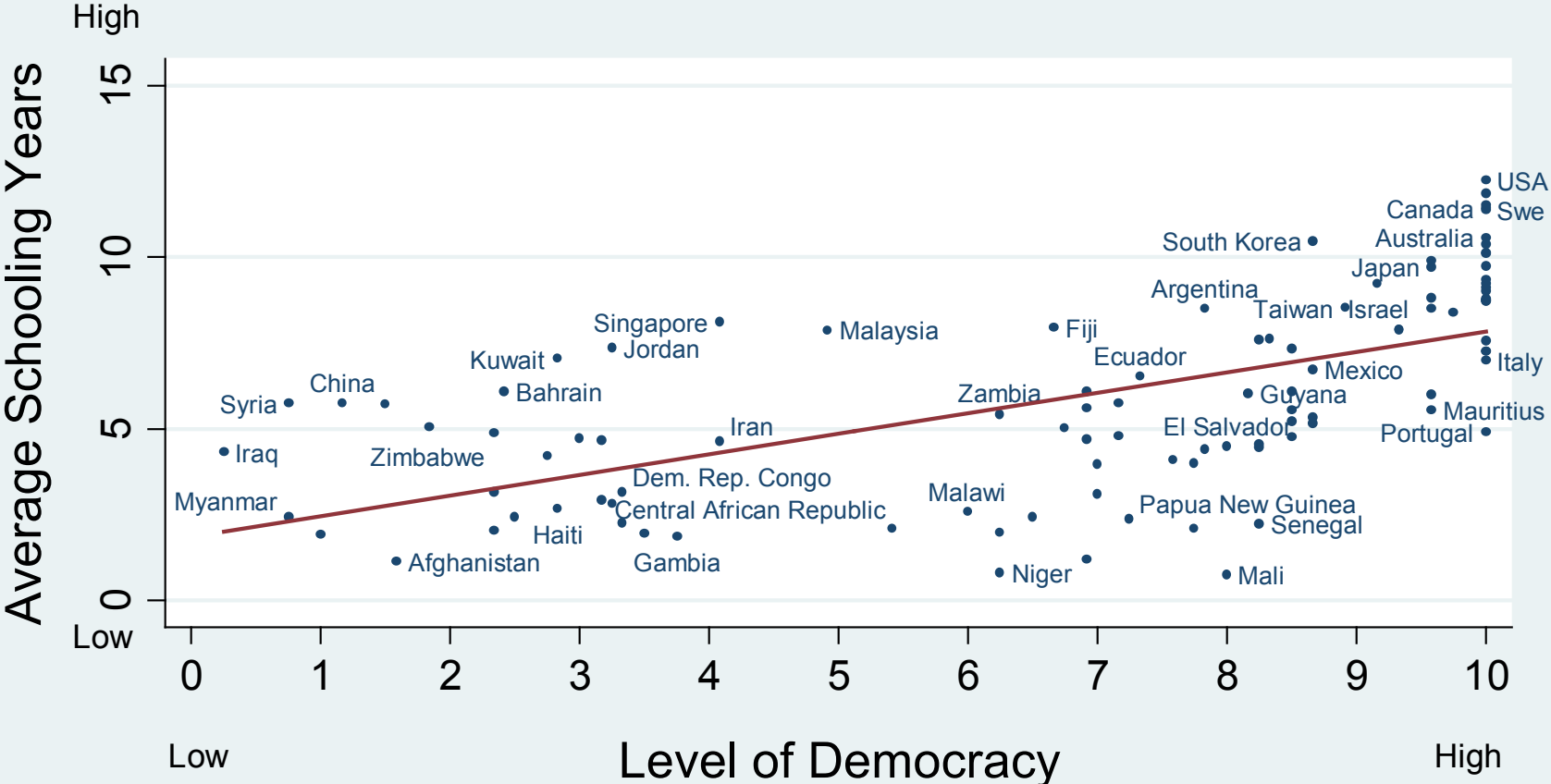


R²=0.19

Sources: Botero et al (1997-2002), Freedom House/Polity (2002-2006)

Data runs by: Richard Svensson

Average Schooling Years vs. Level of Democracy

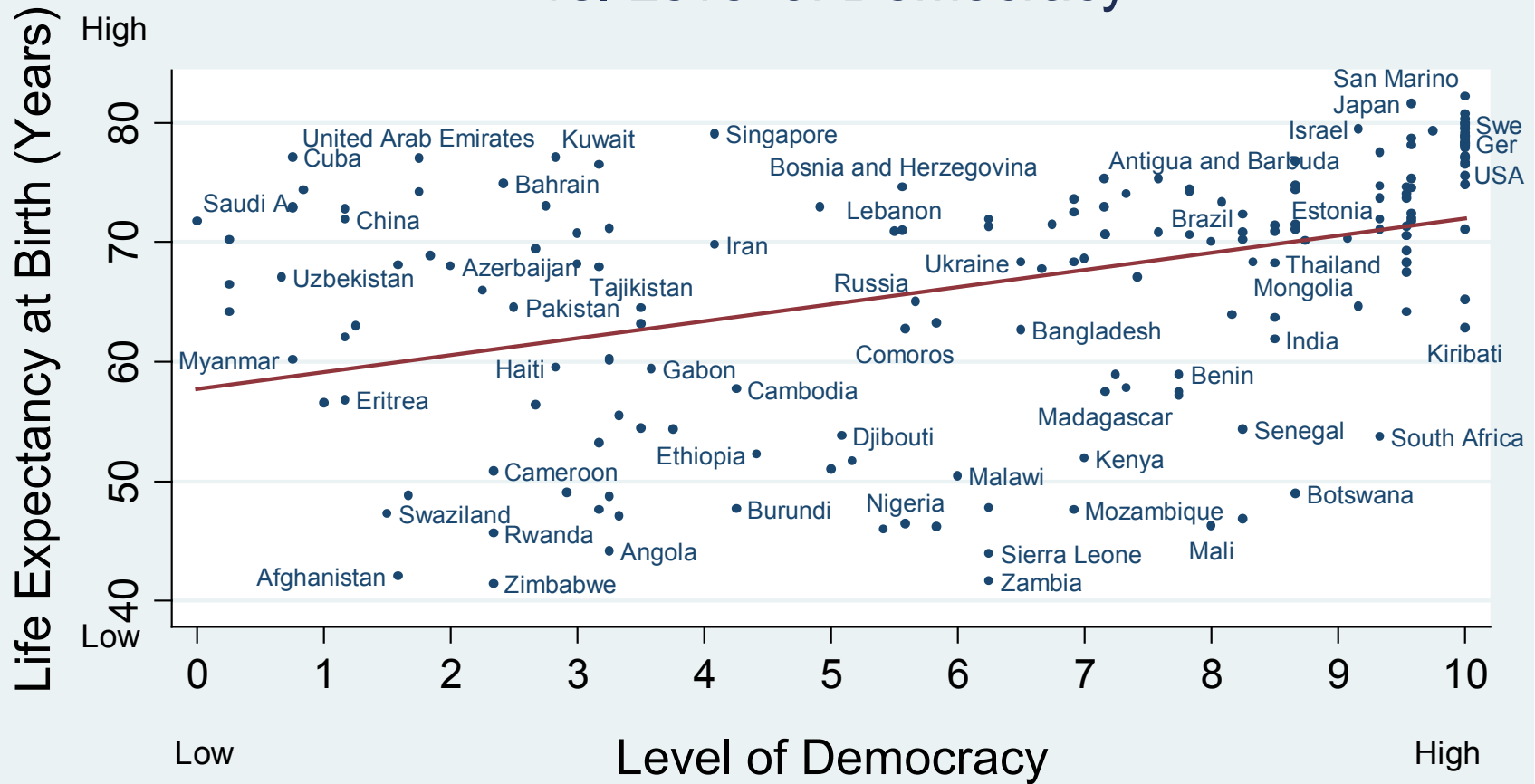


R²=0.38

Sources: Barro & Lee (2000), Freedom House/Polity (2002-2006)

Data runs by: Richard Svensson

Life Expectancy at Birth vs. Level of Democracy

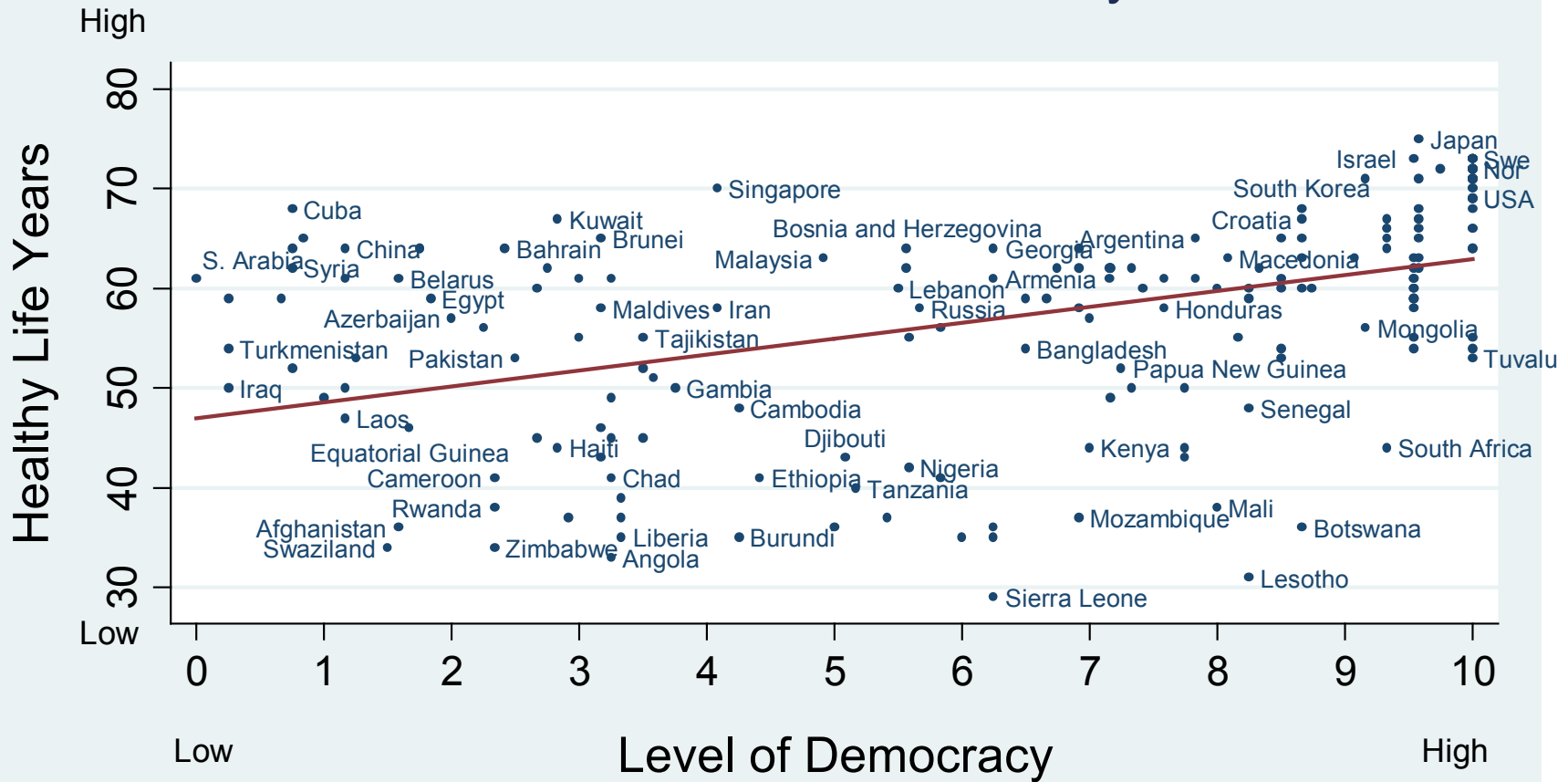


R²=0.19

Sources: World Bank (2000-2006), Freedom House/Polity (2002-2006)

Data runs by: Richard Svensson

Healthy Life Years vs. Level of Democracy

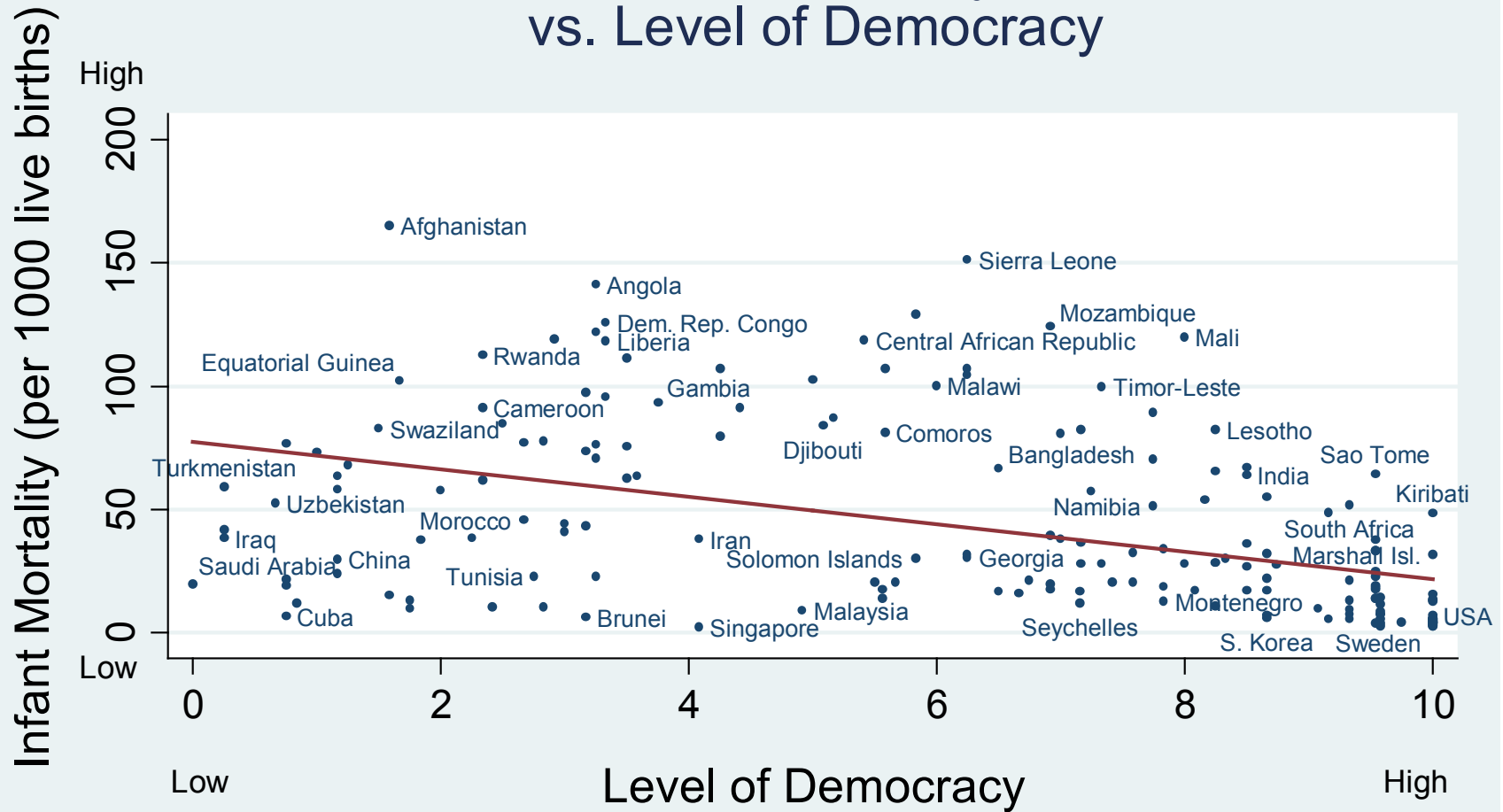


R²=0.21

Sources: WHO (-), Freedom House/Polity (2002-2006)

Data runs by: Richard Svensson

Infant Mortality vs. Level of Democracy

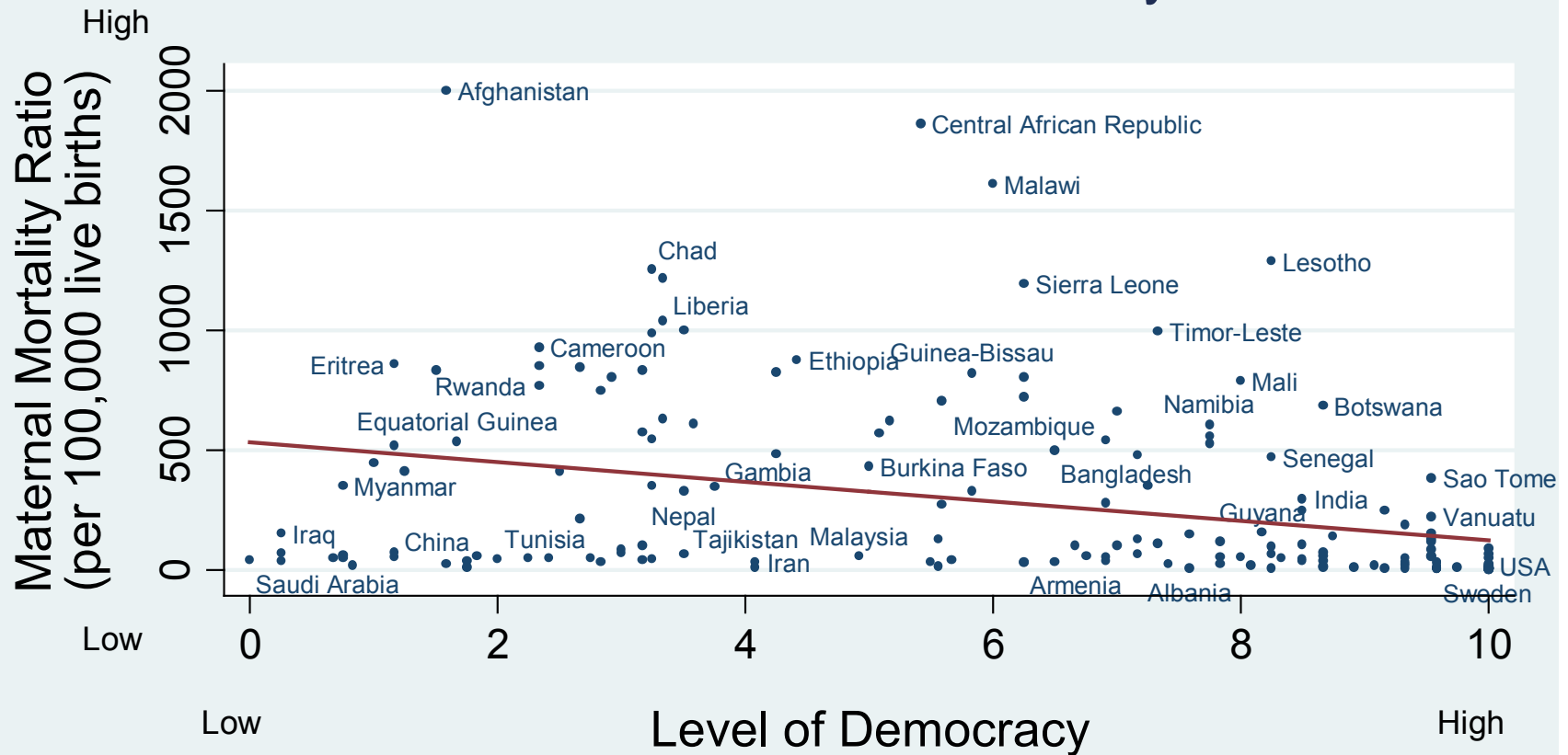


R²=0.22

Sources: World Bank (2000-2002), Freedom House/Polity (2002-2006)

Data runs by: Richard Svensson

Maternal Mortality Ratio vs. Level of Democracy

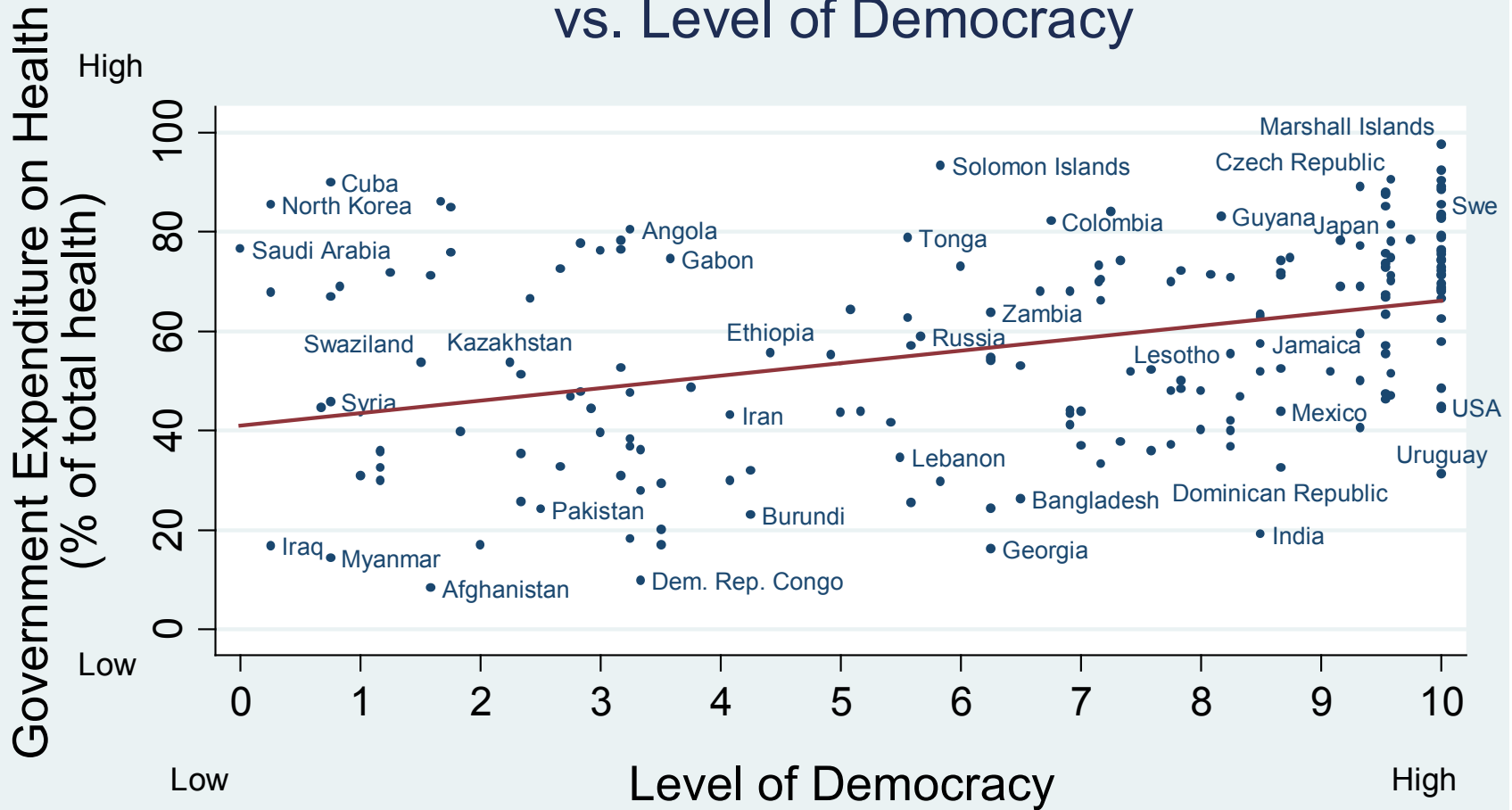


R²=0.12

Sources: Institute for Health Metrics and Evaluation - University of Washington (2002), Freedom House/Polity (2002-2006)

Data runs by: Richard Svensson

Government Expenditure on Health vs. Level of Democracy

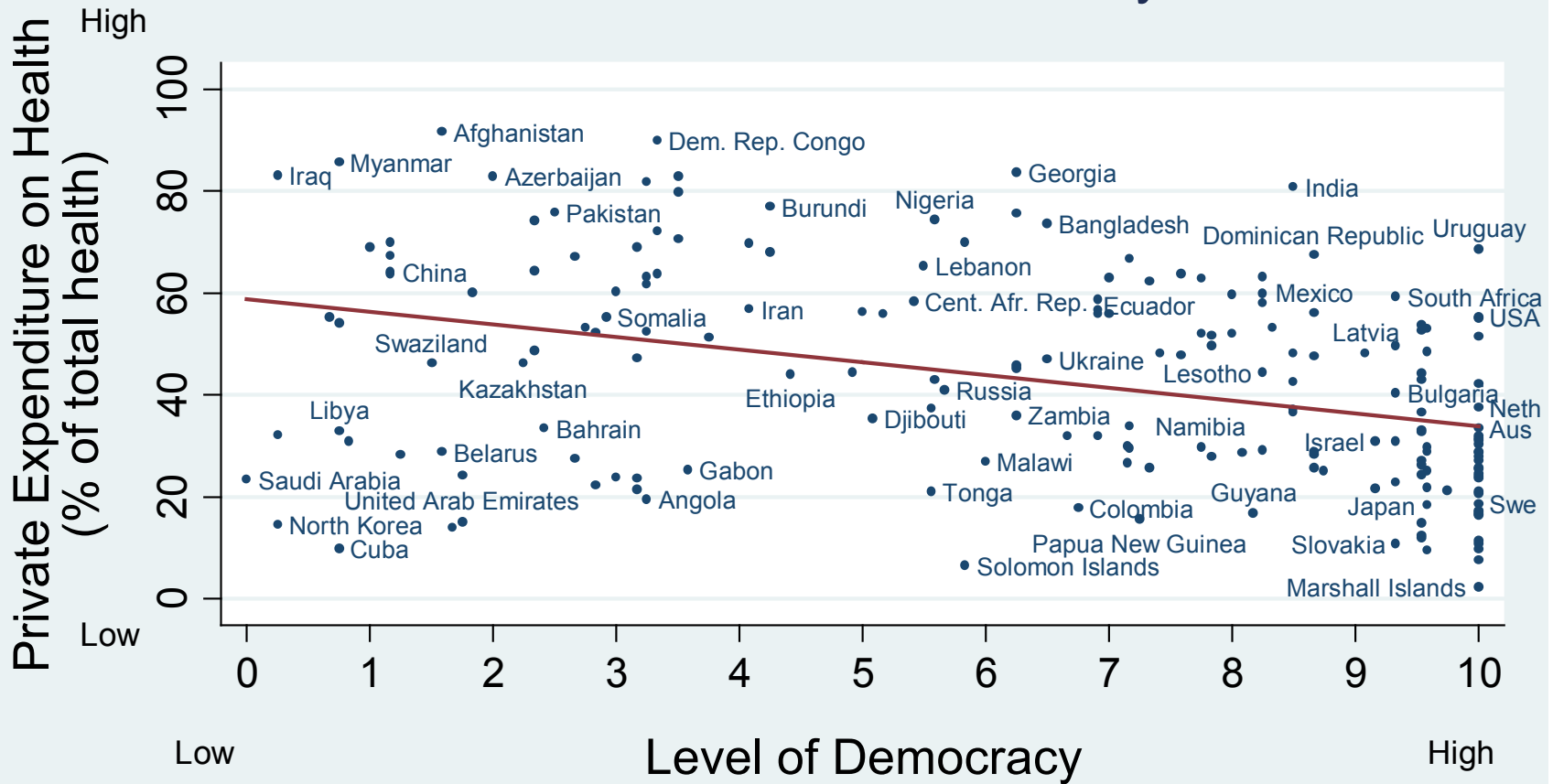


R²=0.15

Sources: WHO (2001-2002), Freedom House/Polity (2002-2006)

Data runs by: Richard Svensson

Private Expenditure on Health vs. Level of Democracy

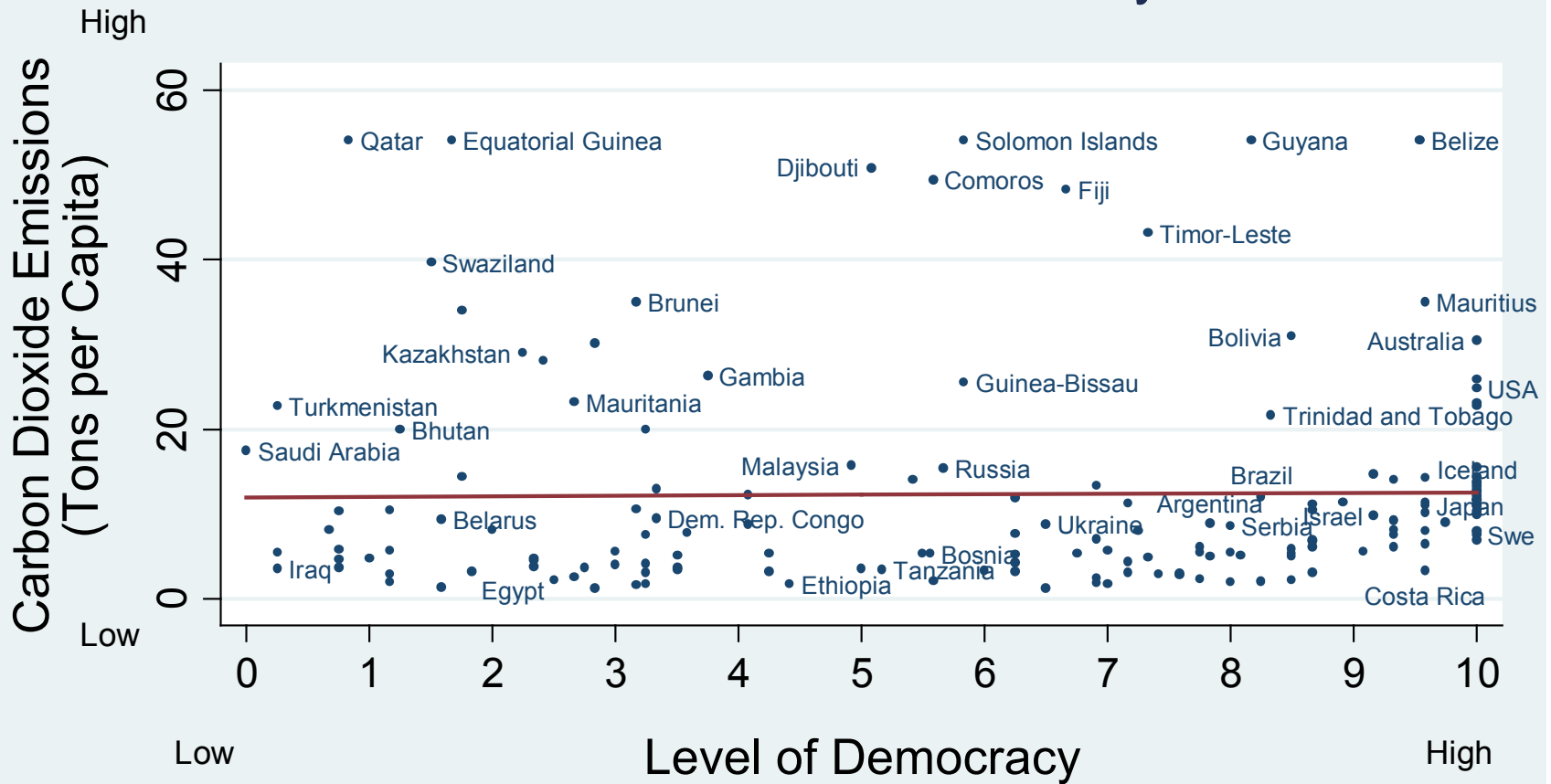


$R^2=0.15$

Sources: WHO (2001-2002), Freedom House/Polity (2002-2006)

Data runs by: Richard Svensson

Carbon Dioxide Emissions vs. Level of Democracy

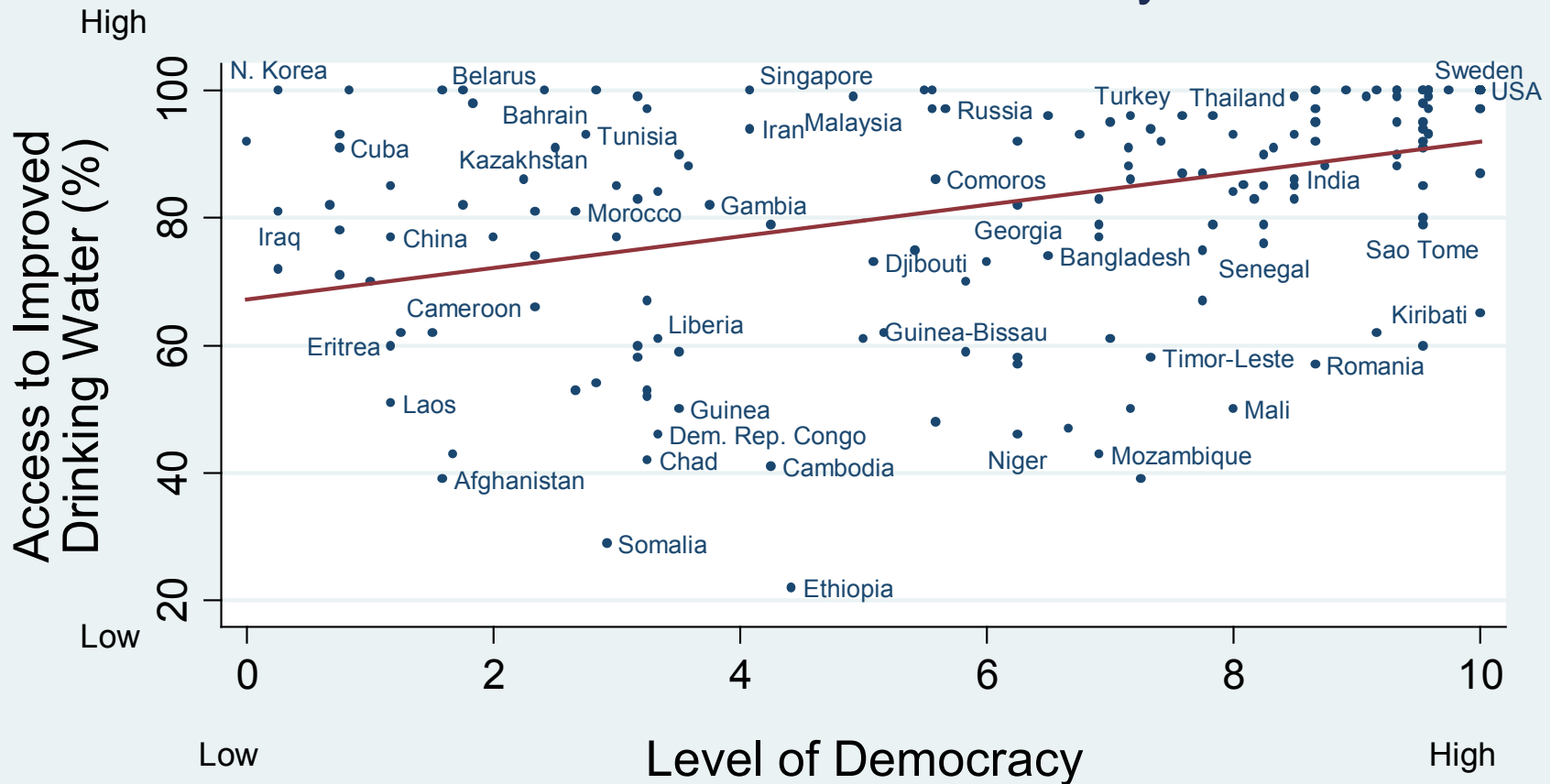


R²=0.00

Sources: Environmental Performance Index (2000-2005), Freedom House/Polity (2002-2006)

Data runs by: Richard Svensson

Access to Improved Drinking Water (%) vs. Level of Democracy

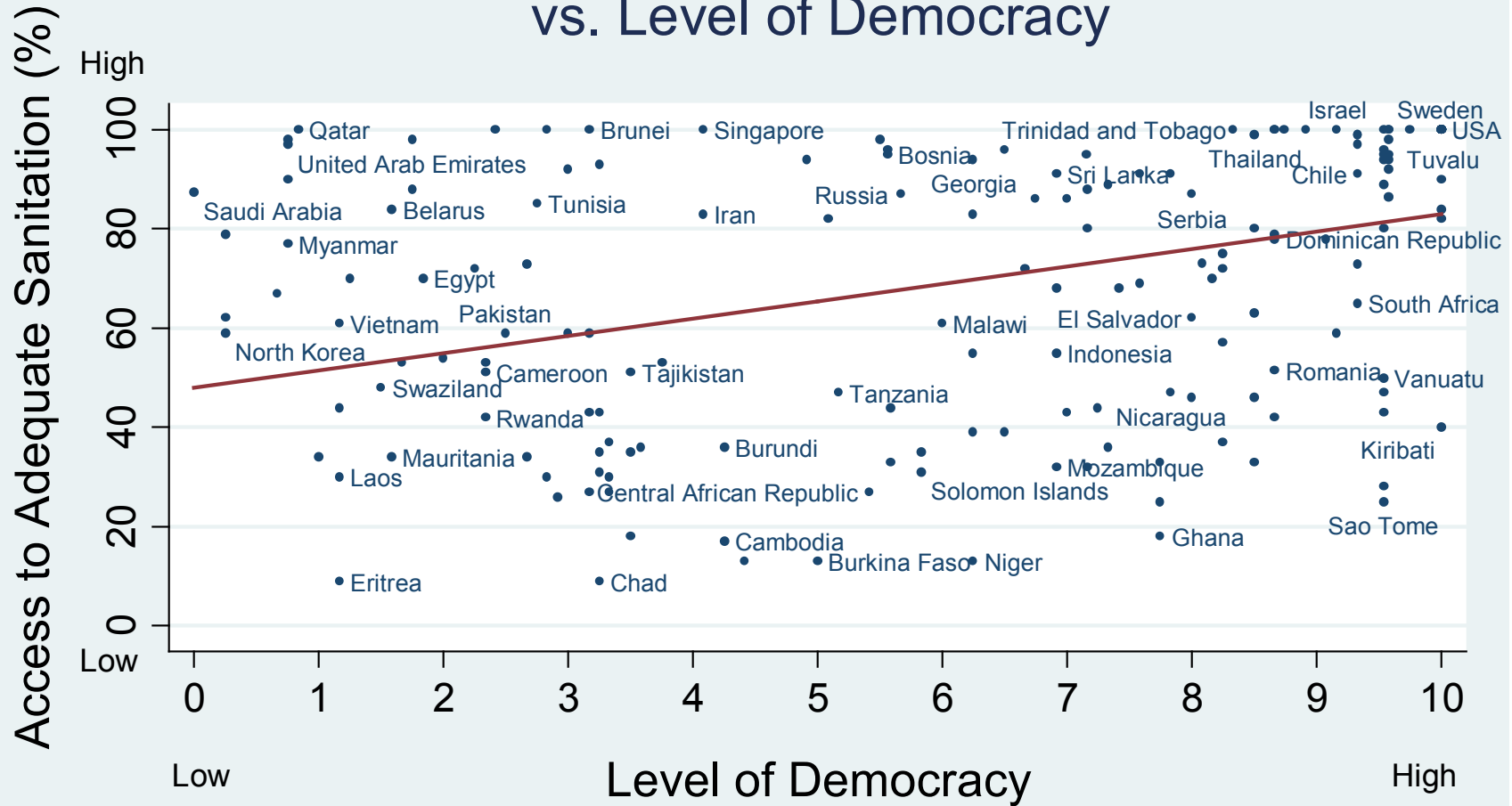


R²=0.18

Sources: Esty et al / WHO (2004), Freedom House/Polity (2002-2006)

Data runs by: Richard Svensson

Access to Adequate Sanitation vs. Level of Democracy

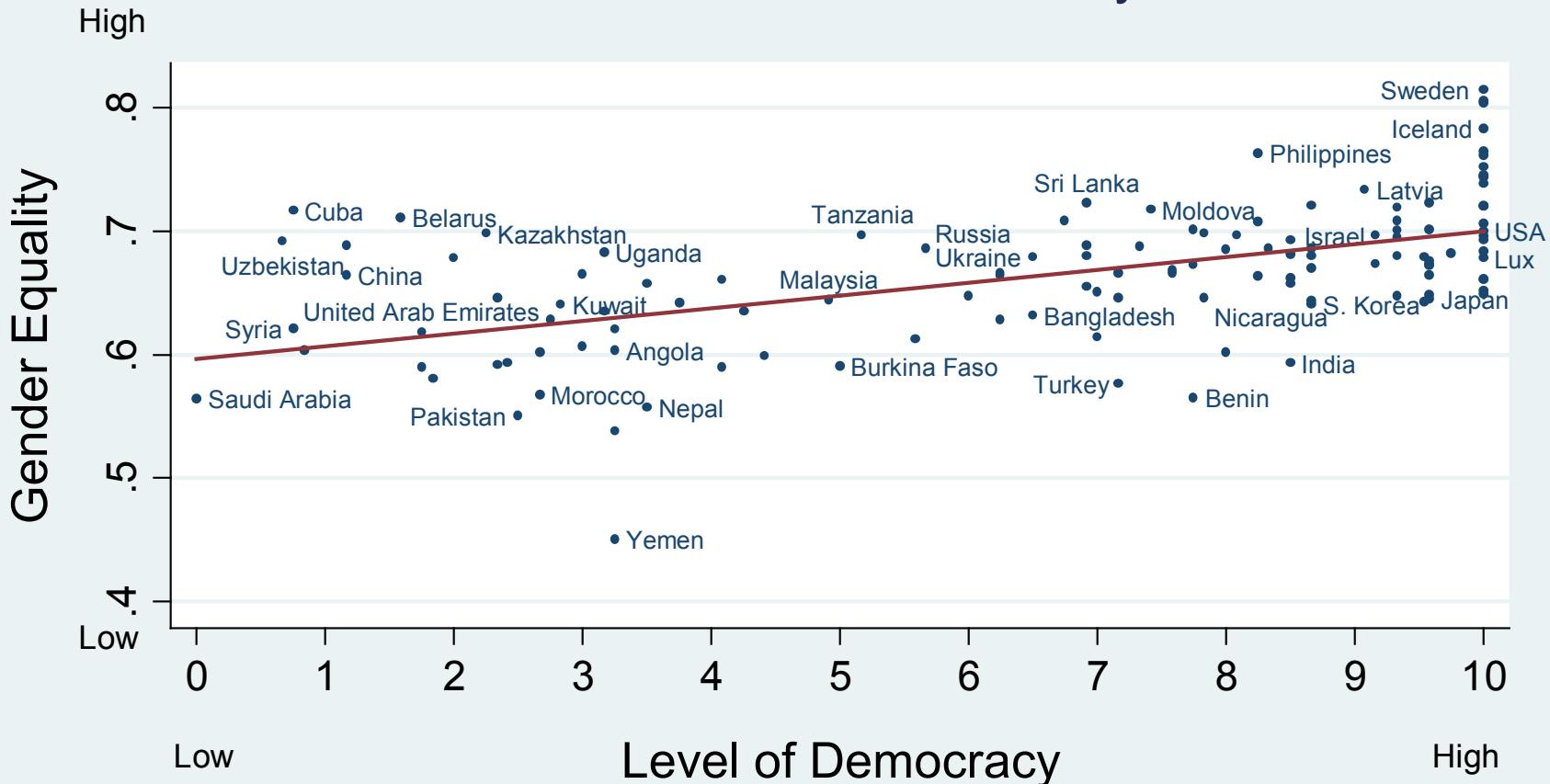


R²=0.16

Sources: Environmental Performance Index (2004-), Freedom House/Polity (2002-2006)

Data runs by: Richard Svensson

Gender Equality vs. Level of Democracy

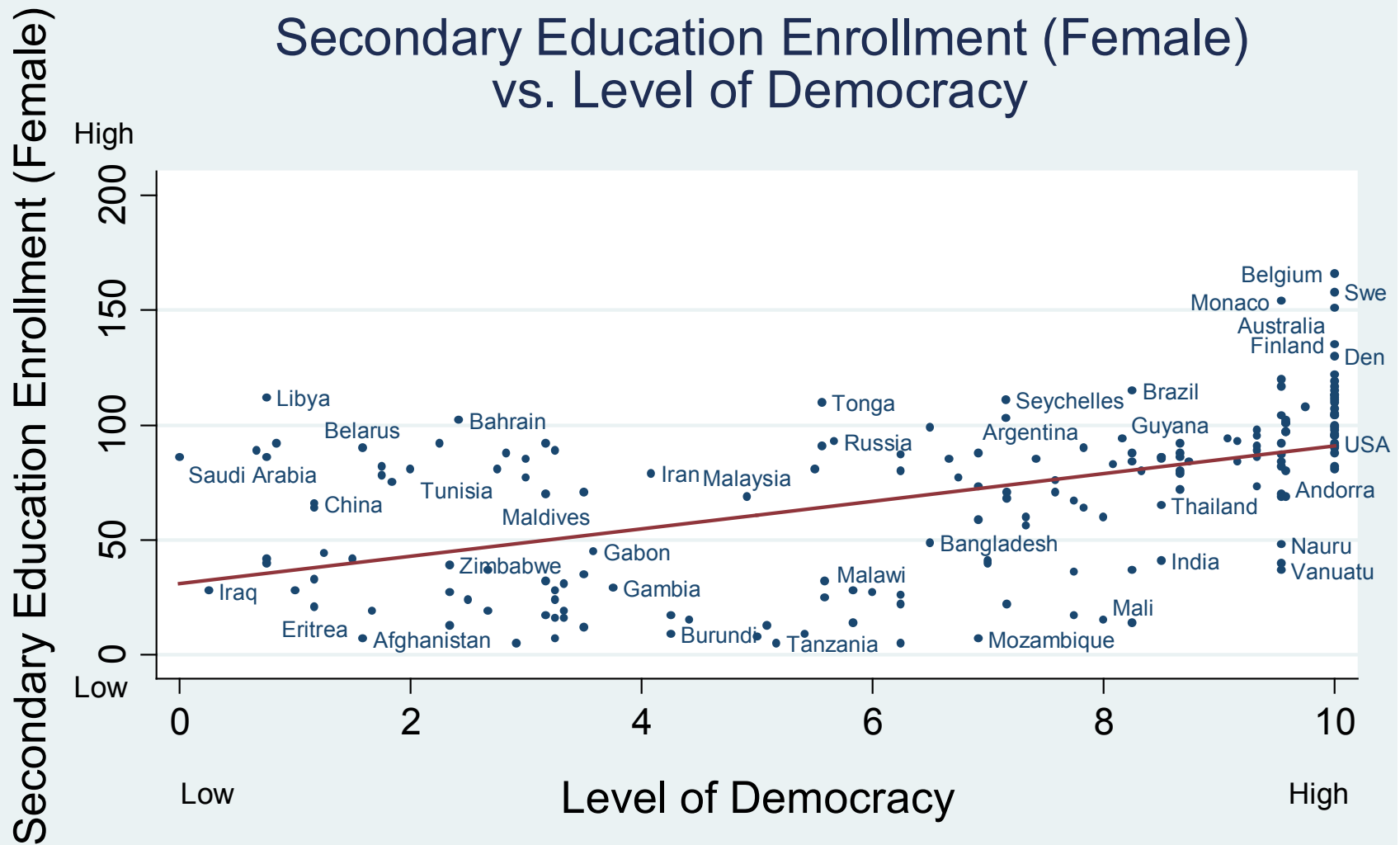


R²=0.31

Sources: World Economic Forum (2005), Freedom House/Polity (2002-2006)

Data runs by: Richard Svensson

Secondary Education Enrollment (Female) vs. Level of Democracy

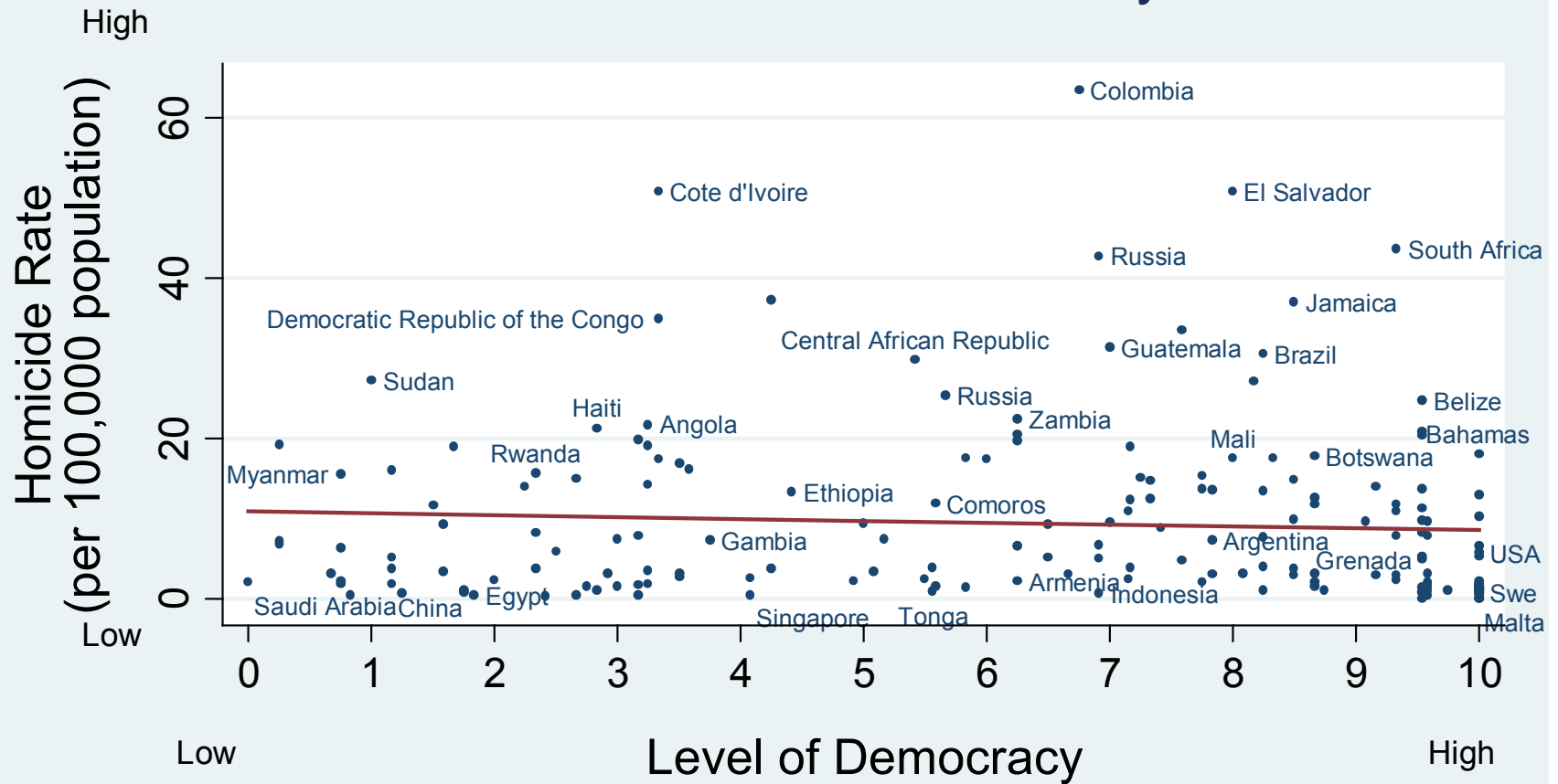


R²=0.27

Sources: UNESCO (1999-2009), Freedom House/Polity (2002-2006)

Data runs by: Richard Svensson

Homicide Rate vs. Level of Democracy

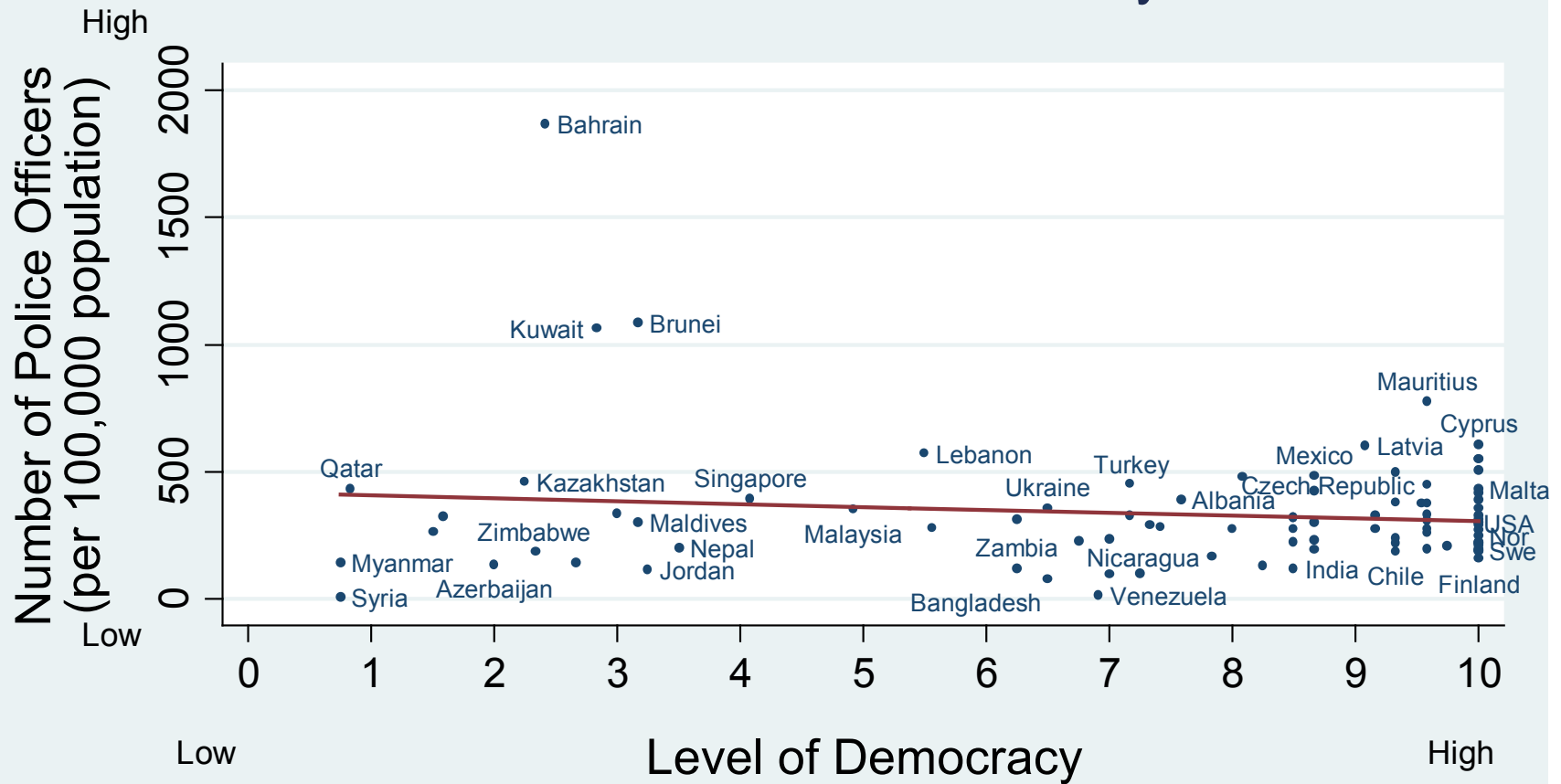


R²=0.01

Sources: UN Data (2010), Freedom House/Polity (2009)

Data runs by: Richard Svensson

Number of Police Officers vs. Level of Democracy

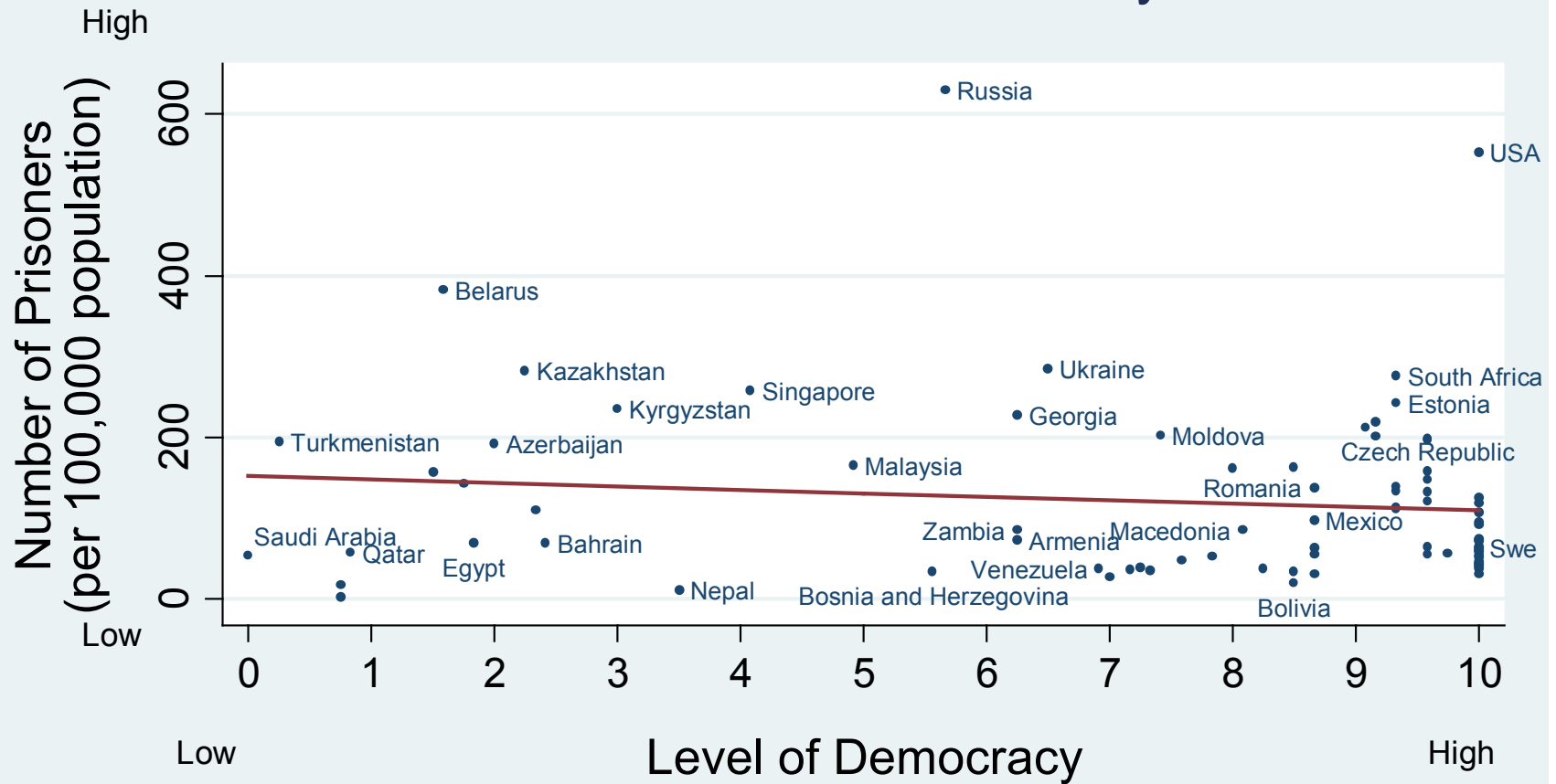


R²=0.02

Sources: UNODC (2000-2006), Freedom House/Polity (2002-2006)

Data runs by: Richard Svensson

Number of Prisoners vs. Level of Democracy

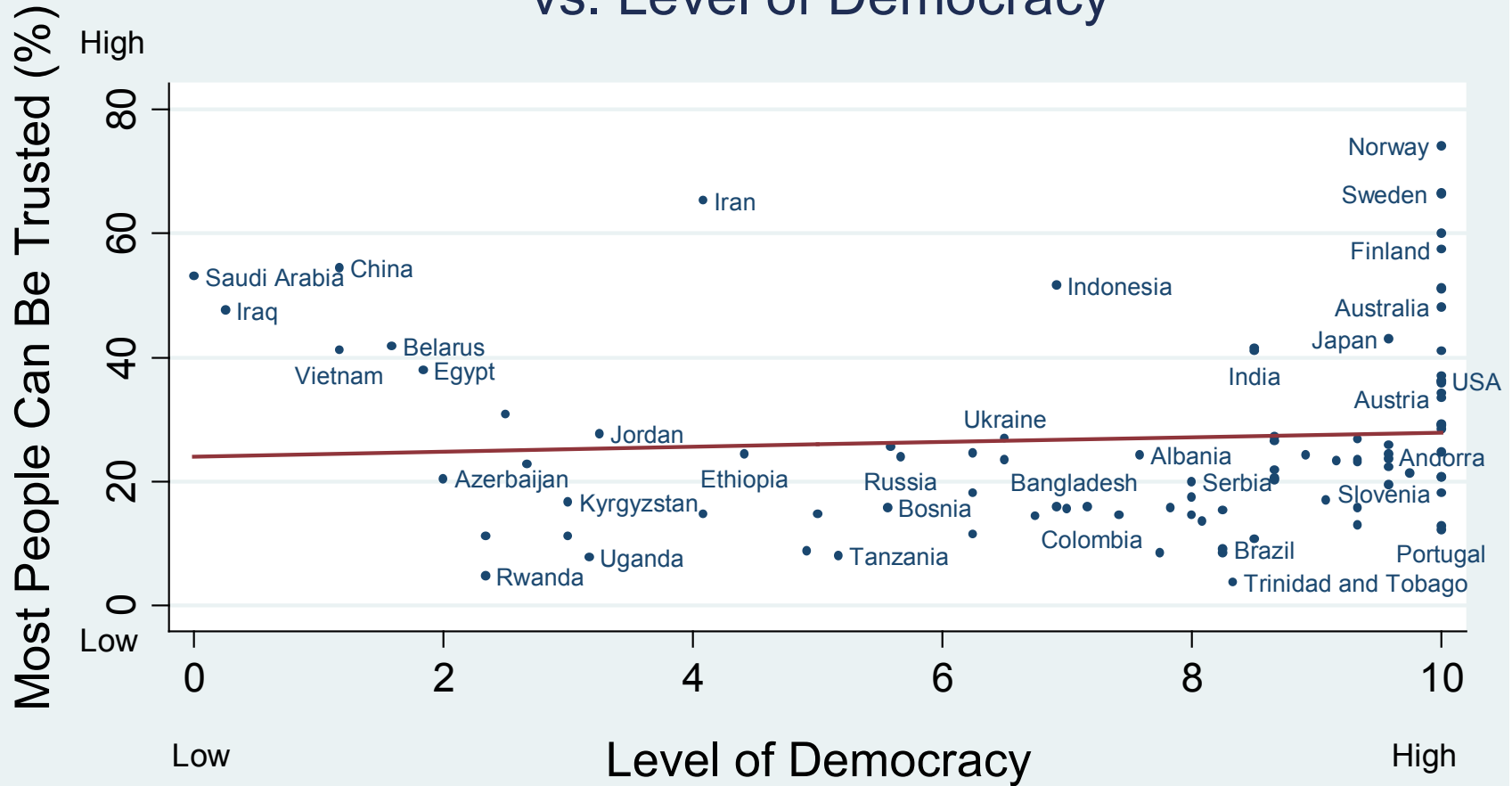


R²=0.01

Sources: UNODC (2000-2006), Freedom House/Polity (2002-2006)

Data runs by: Richard Svensson

Interpersonal Trust vs. Level of Democracy

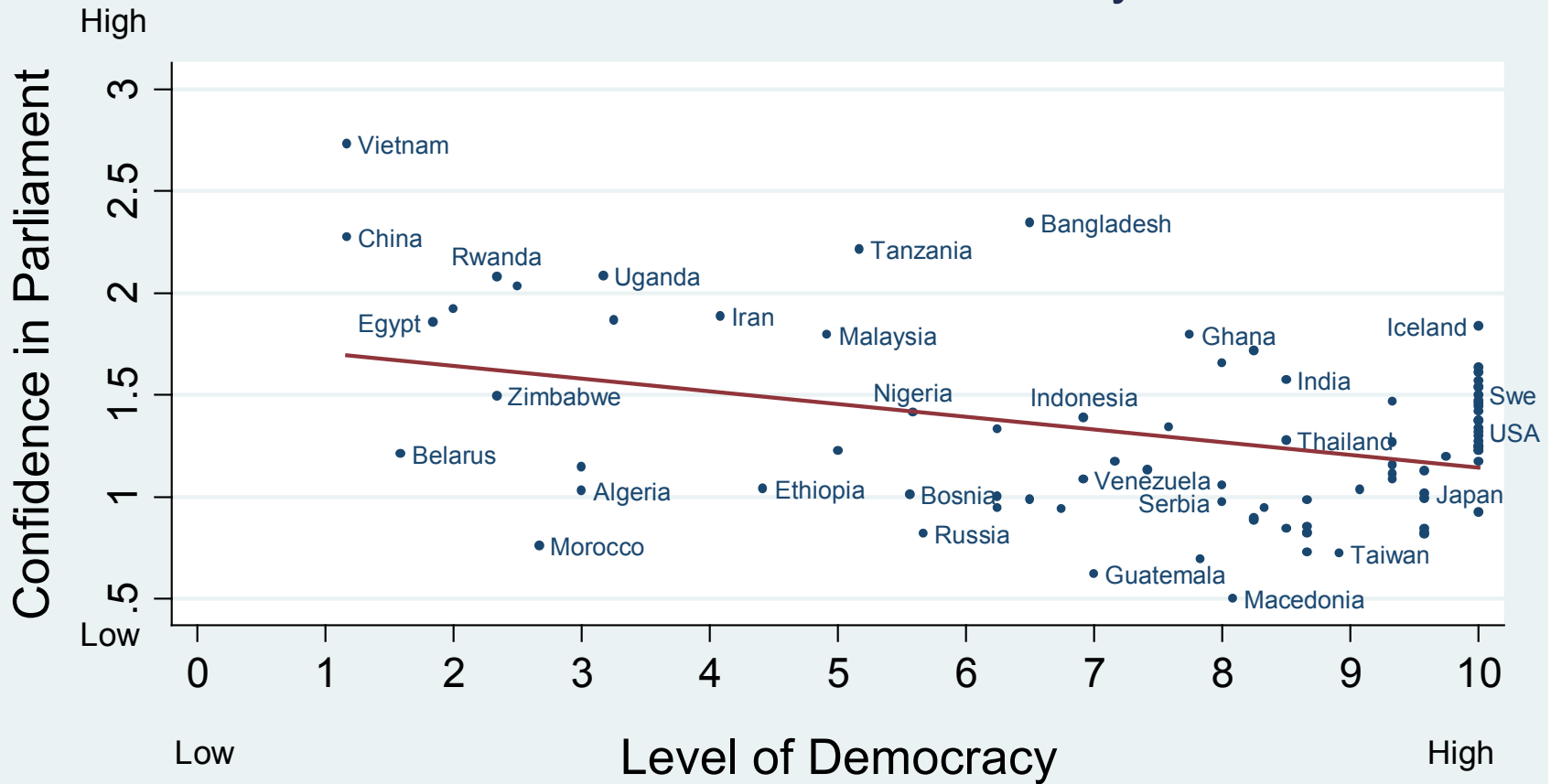


R²=0.01

Sources: World Values Survey (1996-2008), Freedom House/Polity (2002-2006)

Data runs by: Richard Svensson

Confidence in Parliament vs. Level of Democracy

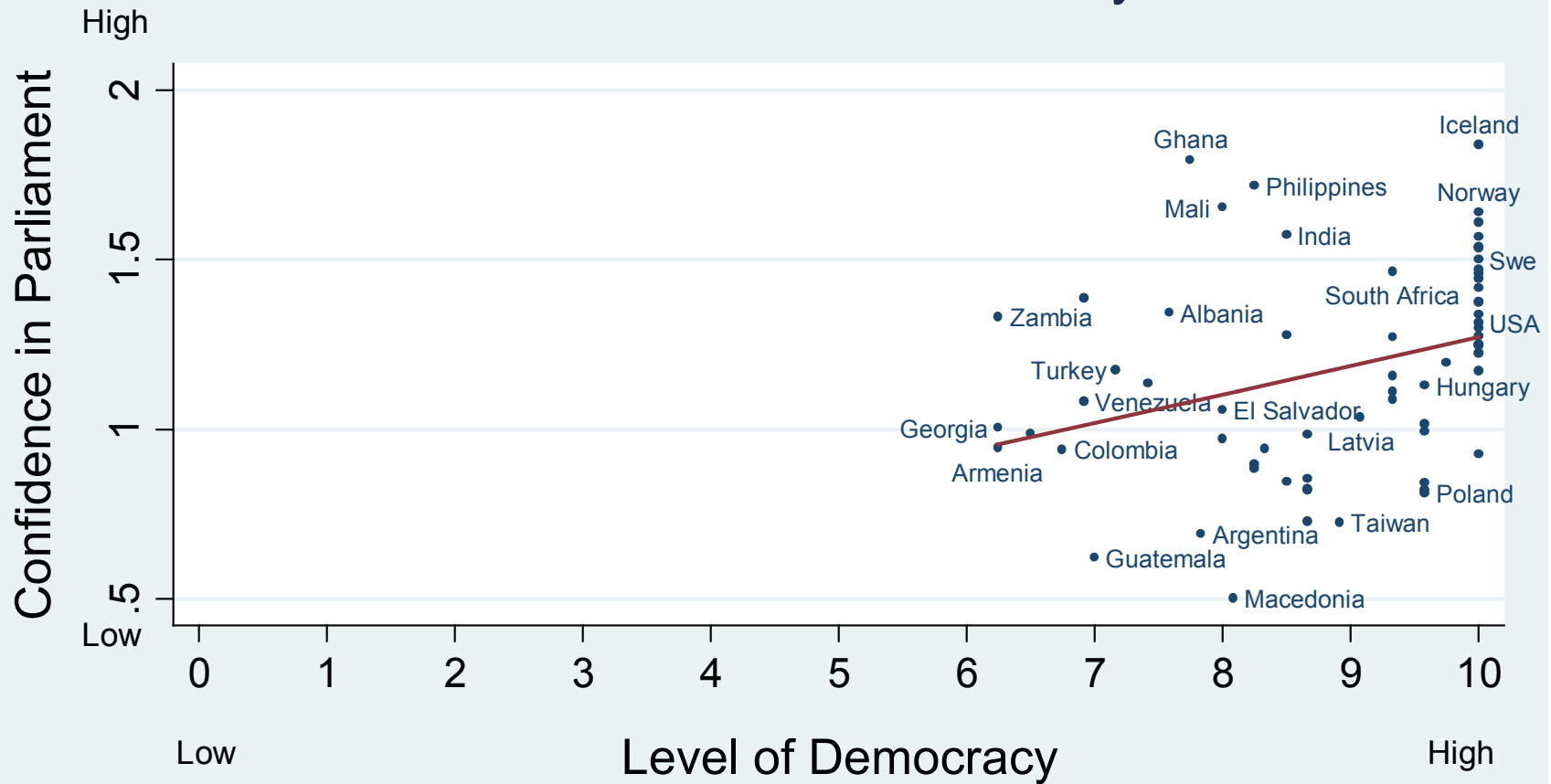


R²=0.15

Sources: World Values Survey (1996-2008), Freedom House/Polity (2002-2006)

Data runs by: Richard Svensson

Confidence in Parliament vs. Level of Democracy



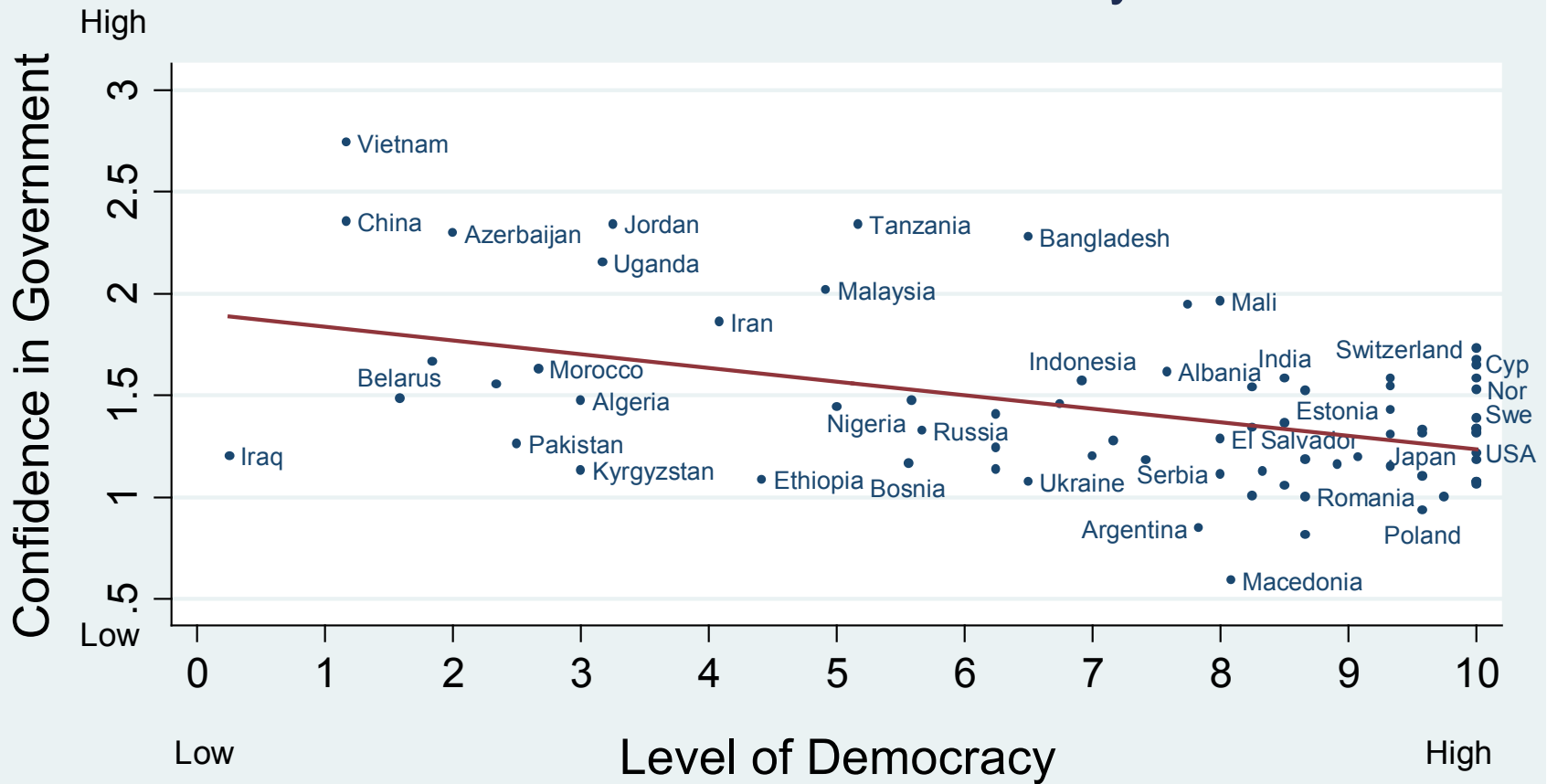
R²=0.11

Sources: World Values Survey (1996-2008), Freedom House/Polity (2002-2006)

N.B. Only democracies (countries with a FreedomHouse/Polity rating above 6) are included. Bangladesh is also excluded.

Data runs by: Richard Svensson

Confidence in Government vs. Level of Democracy

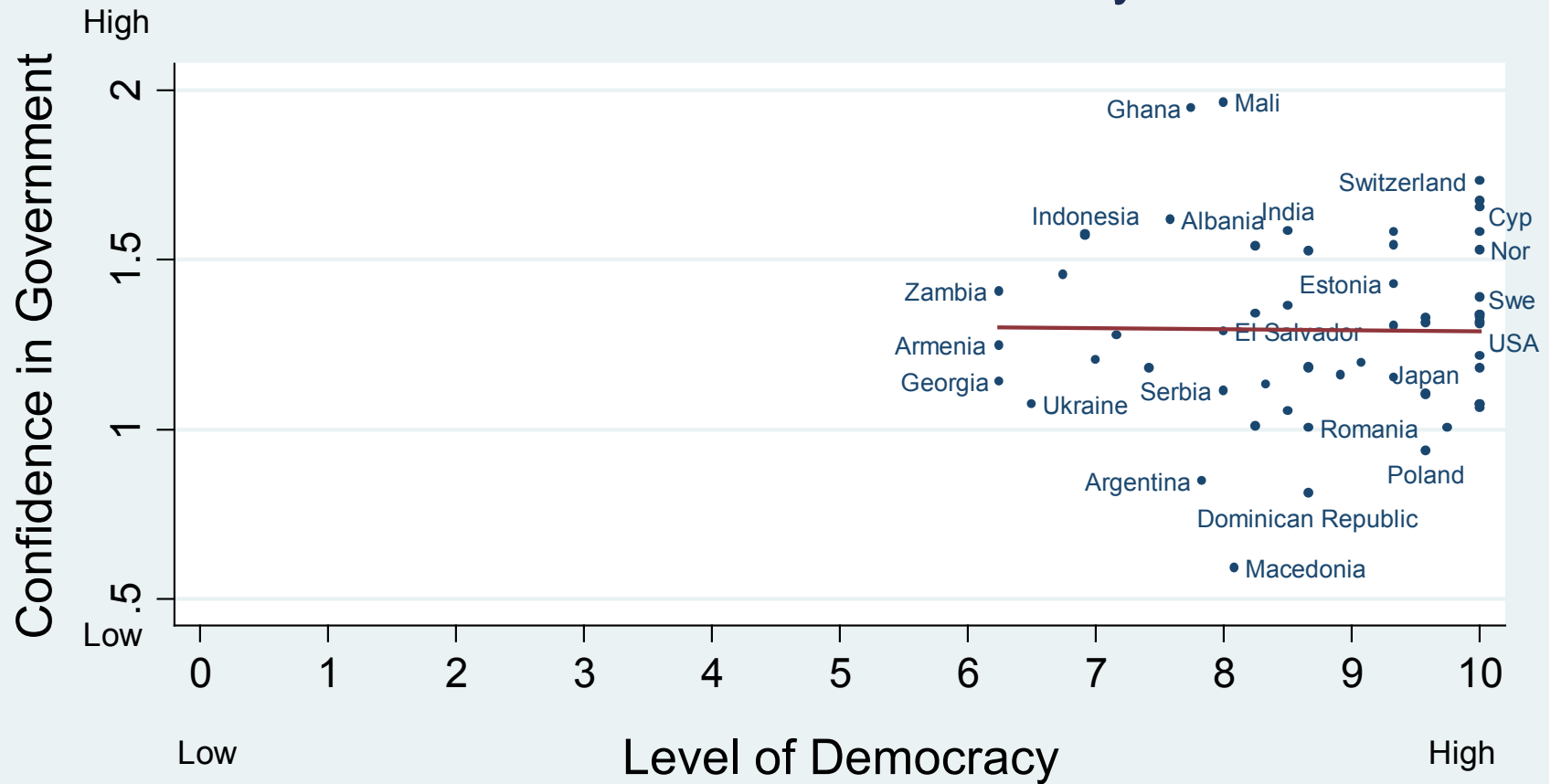


R²=0.22

Sources: World Values Survey (1996-2008), Freedom House/Polity (2002-2006)

Data runs by: Richard Svensson

Confidence in Government vs. Level of Democracy



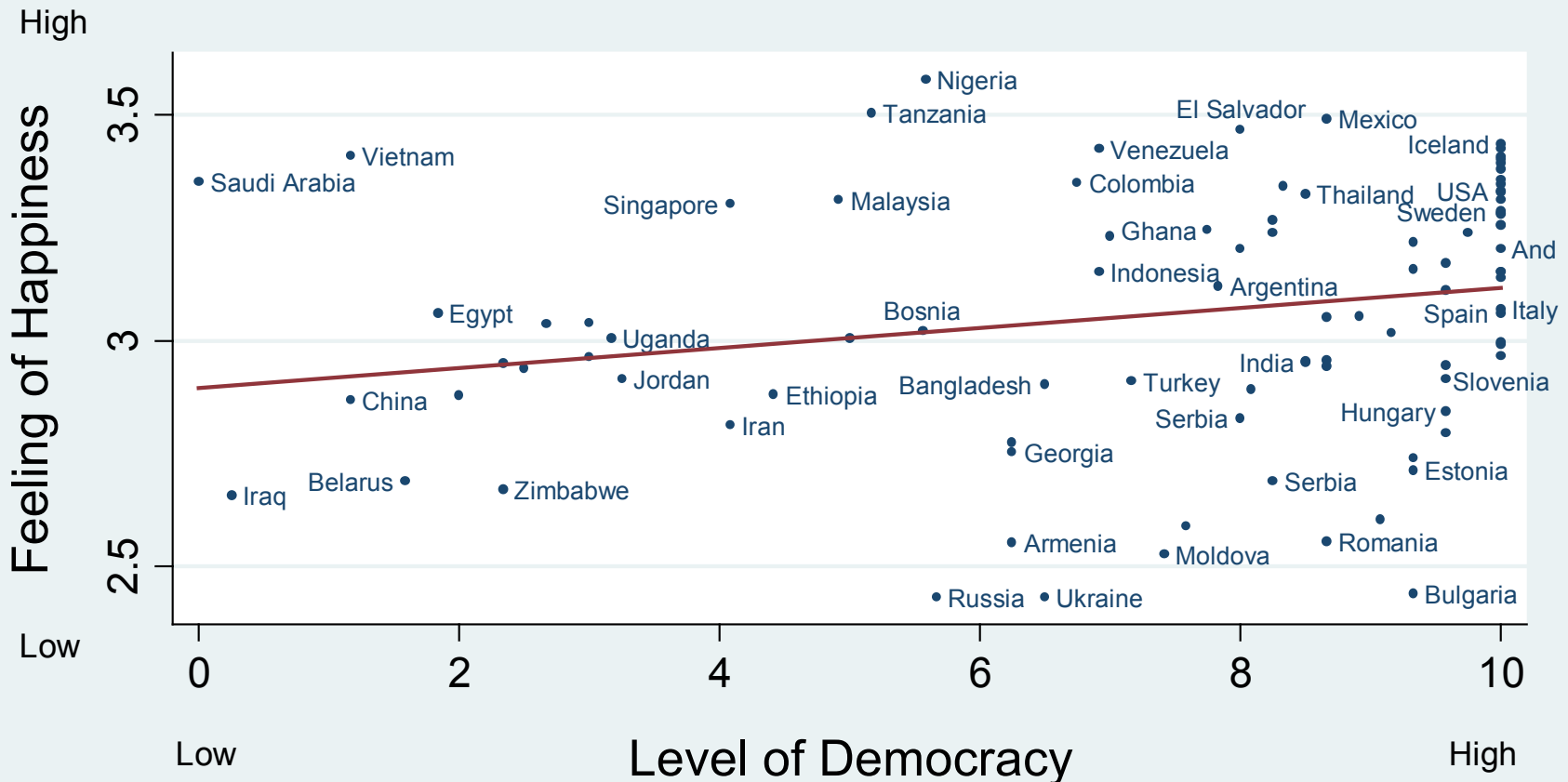
R²=0.00

Sources: World Values Survey (1996-2008), Freedom House/Polity (2002-2006)

N.B. Only democracies (countries with a FreedomHouse/Polity rating above 6) are included. Bangladesh is also excluded.

Data runs by: Richard Svensson

Feeling of Happiness vs. Level of Democracy

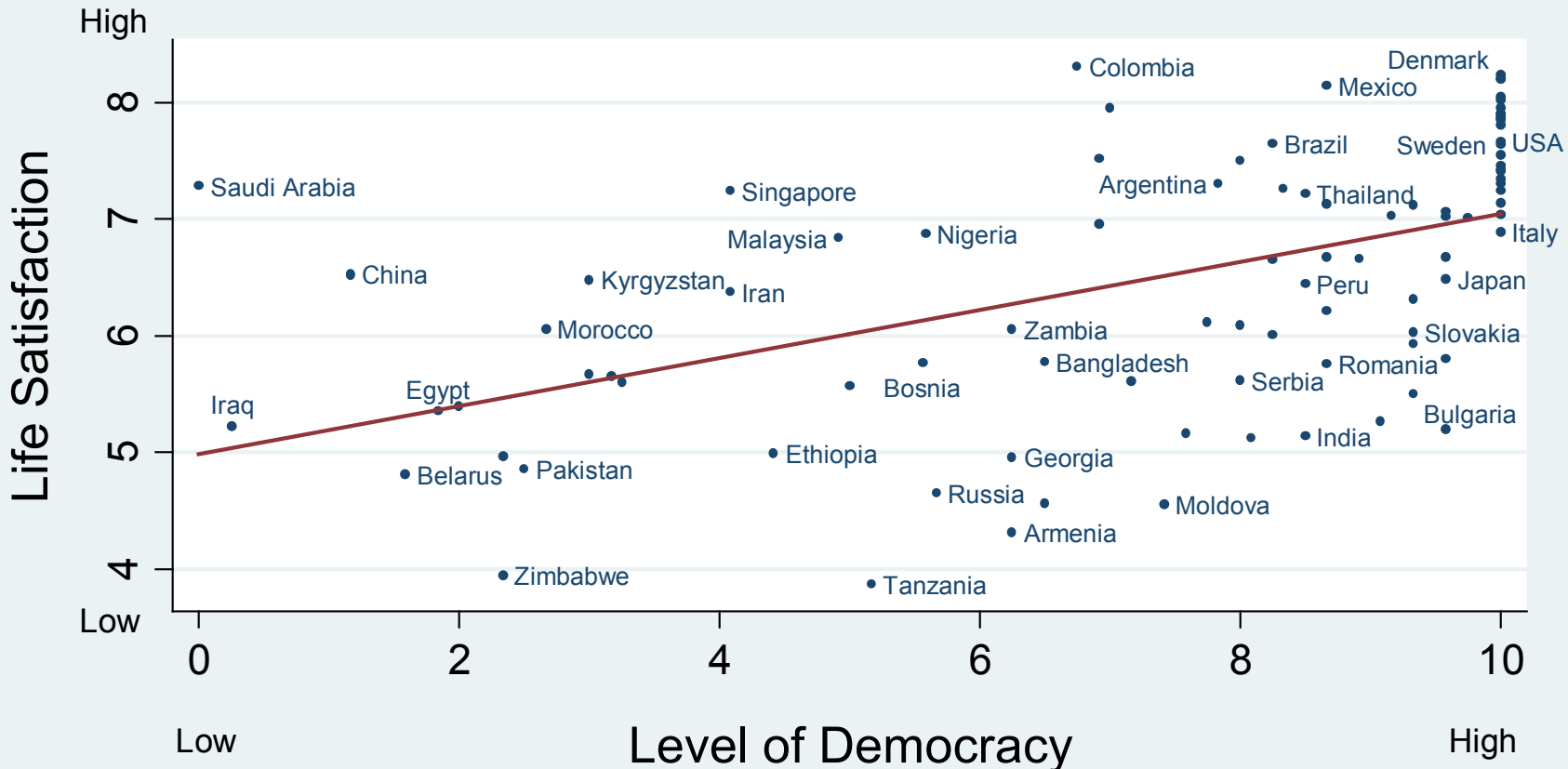


R²=0.05

Sources: World Values Survey (1996-2008), Freedom House/Polity (2002-2006)

Data runs by: Richard Svensson

Life Satisfaction vs. Level of Democracy

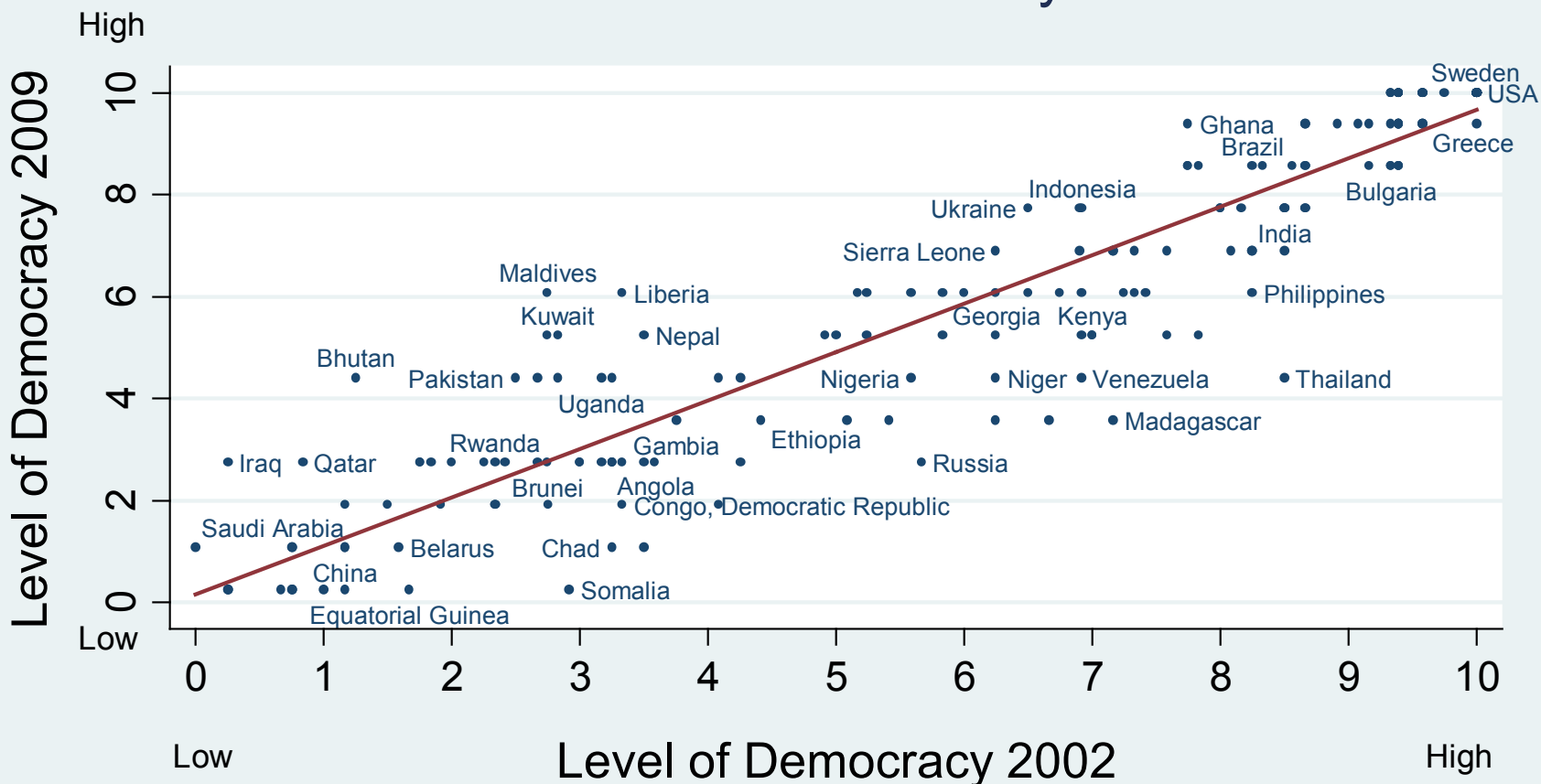


R²=0.28

Sources: World Values Survey (1996-2008), Freedom House/Polity (2002-2006)

Data runs by: Richard Svensson

Level of Democracy 2009 vs. Level of Democracy 2002

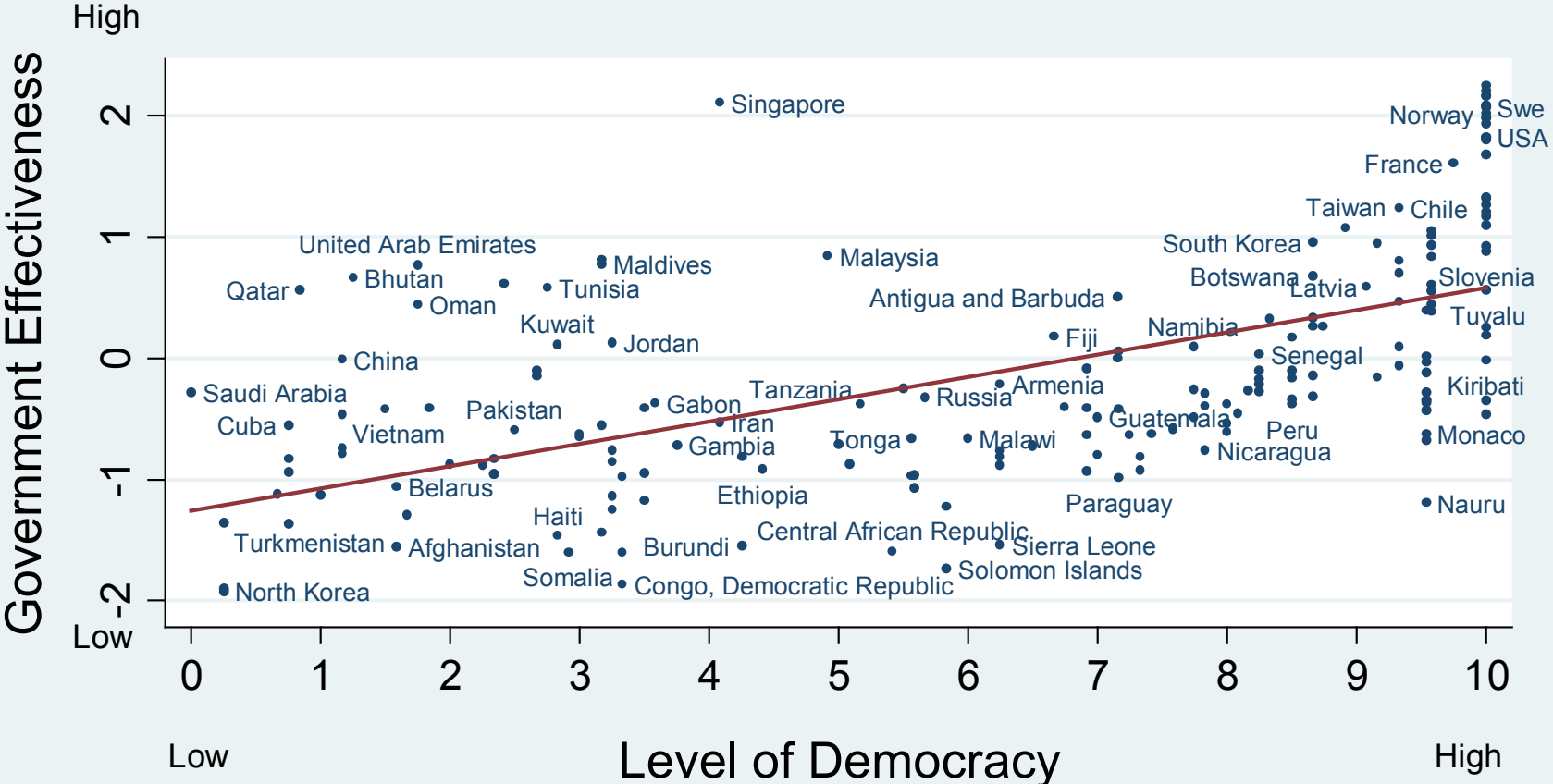


R²=0.88

Sources: Freedom House/Polity (2002), Freedom House/Polity (2009)

Data runs by: Richard Svensson

Government Effectiveness vs. Level of Democracy



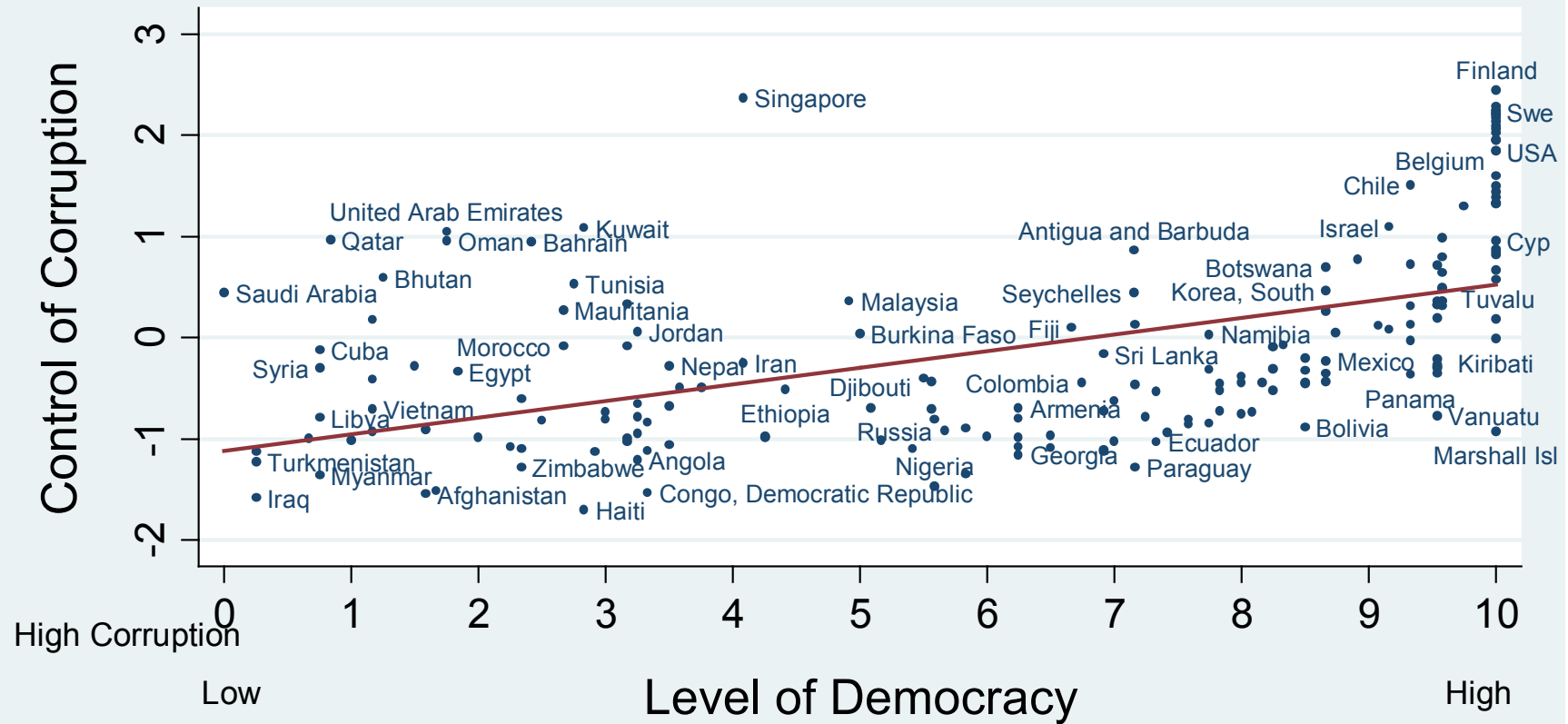
R²=0.34

Sources: World Bank (2002-2006), Freedom House/Polity (2002-2006)

Data runs by: Richard Svensson

Control of Corruption vs. Level of Democracy

Low Corruption



R²=0.27

Sources: World Bank (2002-2008), Freedom House/Polity (2002-2006)

Data runs by: Richard Svensson

Correlates of Democracy – Description of Variables¹

Level of Democracy – Freedom House / Polity

Scale ranges from 0-10 where 0 is least democratic and 10 most democratic. Average of Freedom House (fh_pr and fh_cl) is transformed to a scale 0-10 and Polity (p_polity2) is transformed to a scale 0-10. These variables are averaged into fh_polity2. The imputed version has imputed values for countries where data on Polity is missing by regressing Polity on the average Freedom House measure. Hadenius & Teorell (2005) show that this average index performs better both in terms of validity and reliability than its constituent parts.

GDP / Capita – Gleditsch Trade and GDP Data

In order to fill in gaps in the Penn World Table's mark 5.6 and 6.2 data (see below: Heston, Summers & Aten), Gleditsch has imputed missing data by using an alternative source of data (the CIA *World Fact Book*), and through extrapolation beyond available time-series. This is his estimate of GDP per Capita in US dollars at current year international prices.

Economic Equality (Gini index) – World Development Indicators

Gini measure of economic inequality, where greater values represent greater inequality. Data are based on primary household survey data obtained from government statistical agencies and World Bank country departments. Data for high-income economies are from the Luxembourg Income Study database.

Economic Freedom – Heritage Foundation

The Economic Freedom index uses 10 specific freedoms, some as composites of even further detailed and quantifiable components:

- Business freedom (hf_business)
- Trade freedom (hf_trade)
- Fiscal freedom (hf_fiscal)
- Freedom from government (hf_govt)
- Monetary freedom (hf_monetary)
- Investment freedom (hf_invest)
- Financial freedom (hf_financ)
- Property rights (hf_prights)
- Freedom from corruption (hf_corrupt)
- Labor freedom (hf_labor)

Each of these freedoms is weighted equally and turned into an index ranging from 0 to 100, where 100 represents the maximum economic freedom. Although changes in methodology have been

¹ Some of the variables have been reversed in the scatterplots in order to make the interpretation more intuitive

undertaken throughout the measurement period, continuous backtracking has been used to maximize comparability over time.

GDP / Capita growth – World Development Indicators

Annual percentage growth rate of GDP per capita based on constant local currency. Sources: World Bank and OECD.

Population below \$2 a Day (%) – World Development Indicators

Percentage of the population living on less than \$2.00 a day at 2005 international prices. Data are based on primary household survey data obtained from government statistical agencies and World Bank country departments. Data for high-income economies are from the Luxembourg Income Study database.

Foreign Credit Rating – Standard & Poor's

Credit ratings are forward-looking opinions about credit risk. Standard & Poor's credit ratings express the agency's opinion about the ability and willingness of an issuer, such as a corporation or state or city government, to meet its financial obligations in full and on time.

Credit ratings can also speak to the credit quality of an individual debt issue, such as a corporate note, a municipal bond or a mortgage-backed security, and the relative likelihood that the issue may default.

Ratings are provided by organizations such as Standard & Poor's, commonly called credit rating agencies, which specialize in evaluating credit risk.

Each agency applies its own methodology in measuring creditworthiness and uses a specific rating scale to publish its ratings opinions. Typically, ratings are expressed as letter grades that range, for example, from 'AAA' to 'D' to communicate the agency's opinion of relative level of credit risk.

Human Development Index – UNDP Human Development Report

The Human Development Index (HDI) is a composite index that measures the average achievements in a country in three basic dimensions of human development: a long and healthy life, as measured by life expectancy at birth; knowledge, as measured by the adult literacy rate and the combined gross enrolment ratio for primary, secondary and tertiary schools; and a decent standard of living, as measured by GDP per capita in purchasing power parity (PPP) US dollars.

Government Revenue (% of GDP) – World Development Indicators

Revenue is cash receipts from taxes, social contributions and other revenues. Grants are excluded here. Measured as a percentage of GDP. Source: International Monetary Fund. (World Bank and OECD for GDP estimates.)

Tax Revenue (% of GDP) – World Development Indicators

Tax revenue refers to compulsory transfers to the central government for public purposes. Certain compulsory transfers such as fines, penalties, and most social security contributions are excluded. Measured as a percentage of GDP. Source: International Monetary Fund. (World Bank and OECD for GDP estimates.)

Social Security Laws – Botero, Djankov, La Porta, López-de-Silanes & Shleifer Regulation of Labor

Measures social security benefits as the average of the three variables:

- Old Age, Disability and Death Benefit Index
- Sickness and Health Benefits Index
- Unemployment Benefits Index

Average Schooling Years – Barro & Lee

Average schooling years in the total population aged 25 and over.

Life Expectancy – World Development Indicators

Life expectancy at birth indicates the number of years a newborn infant would live if prevailing patterns of mortality at the time of its birth were to stay the same throughout its life. Sources: United Nations Population Division, national statistical offices, Eurostat, Secretariat of the Pacific Community, and U.S. Census Bureau.

Healthy Life Years – WHO Statistical Information System

Average number of years that a person can expect to live in "full health" by taking into account years lived in less than full health due to disease and/or injury.

Infant Mortality Rate – World Development Indicators

Infant mortality rate is the number of infants dying before reaching one year of age, per 1,000 live births in a given year. Source: Inter-agency Group for Child Mortality Estimation (UNICEF, WHO, World Bank, UNPD, universities and research institutions).

Maternal Mortality Rate – Institute for Health Metrics and Evaluation University of Washington

Number of maternal deaths per 100,000 live Births.

Government Expenditure on Health (% of total health) – WHO Statistical Information System

Government expenditure on health care services and goods as a percentage of total expenditure on health. Expenditures on health include final consumption, subsidies to producers, and transfers to households (chiefly reimbursements for medical and pharmaceutical bills). Besides domestic funds it also includes external resources (mainly as grants passing through the government or loans channeled through the national budget).

Private Expenditure on Health (% of total health) – WHO Statistical Information System

Private expenditure on health-care services and goods as a percentage of total expenditure on health.

CO₂ Emissions / Capita – Environmental Performance Index

Emissions of greenhouse gases per capita, measured in tons of carbon dioxide equivalents.

Access to Improved Drinking Water – Environmental Performance Index

The percentage of population with an access to an improved water source. Original source is WHO.

Access to Adequate Sanitation – Environmental Performance Index

The percentage of population with an access to an improved source of sanitation. Original source is WHO.

Gender Equality – World Economic Forum

All scores are reported on a scale of 0 to 1, with 1 representing maximum gender equality. The study measures the extent to which women have achieved full equality with men in five critical areas:

- Economic participation
- Economic opportunity
- Political empowerment
- Educational Attainment
- Health and well-being

Secondary Education Enrollment (female) – UNESCO Institute for Statistics

All values given are gross enrollment rate (GER). GER is defined as the number of pupils enrolled at a given level of education, regardless of age, expressed as a percentage of the population in the theoretical age group for the same level of education. Gross enrollment rate can be over 100% due to the inclusion of over-aged and under-aged pupils/students because of early or late entrants, and grade repetition. In this case, a rigorous interpretation of GER needs additional information to assess the extent of repetition, late entrants, etc.

Homicide Rate – UNODC

Intentional homicide, rate per 100,000 population. Intentional homicide is defined as unlawful death purposefully inflicted on a person by another person.

Number of Police Officers – UNODC

Police officers per 100,000 population.

Number of Prisoners – UNODC

Sentenced incarcerated persons per 100,000 population

Interpersonal Trust – World Values Survey

“Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?”

- (1) *Most people can be trusted*
- (2) *Can't be too careful”*

Confidence in Parliament – World Values Survey

“I am going to name a number of organizations. For each one, could you tell me how much confidence you have in them: is it a great deal of confidence, quite a lot of confidence, not very much confidence or none at all?”

- (1) A great deal
- (2) Quite a lot
- (3) Not very much
- (4) None at all”

Confidence in Government – World Values Survey

“I am going to name a number of organizations. For each one, could you tell me how much confidence you have in them: is it a great deal of confidence, quite a lot of confidence, not very much confidence or none at all?”

- (1) A great deal
- (2) Quite a lot
- (3) Not very much
- (4) None at all”

Feeling of Happiness – World Values Survey

“Taking all things together, how happy would you say you are?”

- (1) Very happy
- (2) Quite happy
- (3) Not very happy
- (3) Not at all happy”

Life Satisfaction – 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”

Government Effectiveness – World Bank Governance Indicators

“Government Effectiveness” combines into a single grouping responses on the quality of public service provision, the quality of the bureaucracy, the competence of civil servants, the independence of the civil service from political pressures, and the credibility of the government’s commitment to policies. The main focus of this index is on “inputs” required for the government to be able to produce and implement good policies and deliver public goods.

Control of Corruption – World Bank Governance Indicators

“Control of Corruption” measures perceptions of corruption, conventionally defined as the exercise of public power for private gain. The particular aspect of corruption measured by the various sources differs somewhat, ranging from the frequency of “additional payments to get things done”, to the effects of corruption on the business environment, to measuring “grand corruption” in the political arena or in the tendency of elite forms to engage in “state capture”.