# The Economic Determinants of Democracy and Dictatorship

How does economic development influence the democratization process?

Most economic explanations for democracy can be linked to a paradigm called modernization theory.

Modernization theory argues that all societies pass through the same historical stages of economic development.

Although modernization theory was originally developed by economists, it was later taken up by political scientists.

| FIGURE 6.1 | Classic Modernization Theory |
| --- | --- |

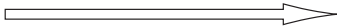| "Traditional" society | | "Modern" society |
| --- | --- | --- |
| Large agriculture | ⟹ | Small agriculture |
| Small industry | ⟹ | Large industry |
| Small service | ⟹ | Large service |
| Dictatorship | ⟹ | Democracy |
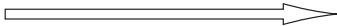
Classic modernization theory predicts that as countries develop economically, they are

1. more likely to *become* democratic

   *and*

2. more likely to *remain* democratic.

A central implication is that we should see a strong relationship between economic development and democracy.

**FIGURE 6.2** Proportion of Democracies at Various Levels of Income, 1950–1990
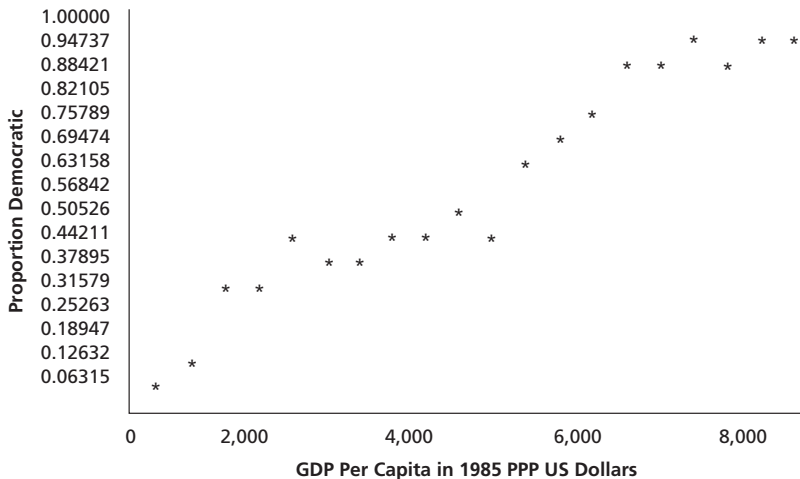
The data are consistent with two different stories linking income and democracy.

1. Classic modernization theory predicts that democracy is more likely to emerge and survive as countries develop and become richer.

2. The survival story predicts that democracy is more likely to survive as countries develop and become richer, but it is not more likely to emerge.

Why might increased income help democratic survival?

Suppose you are a rich person living in a democracy.

- Autocracy is a big gamble.

Suppose you are a poor person living in a democracy.

- Autocracy is less of a gamble.

FIGURE 6.3

**Expected Probability of Regime Transitions as Income Increases according to Modernization Theory and the Survival Story**
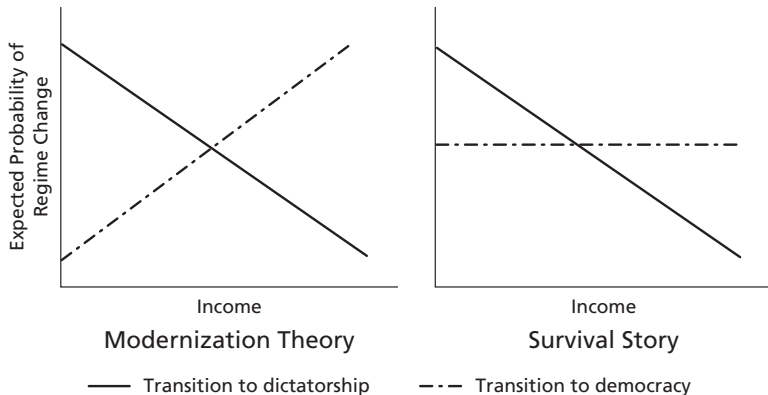


Transition to dictatorship    −·−· Transition to democracy

| TABLE 6.1 | Implications from Modernization Theory and the Survival Story |
|---|---|

| Modernization theory and survival story |
|---|
| 1. Democracy is more common in rich countries than poor countries. |
| 2. Transitions to dictatorship become less likely as income increases. |

| Modernization theory | Survival story |
|---|---|
| 3a. Transitions to democracy become more likely as income increases. | 3b. Transitions to democracy are unaffected by increases in income. |
| 4a. Regime transitions may or may not become less likely as countries become richer. | 4b. Regime transitions become less likely as countries become richer. |
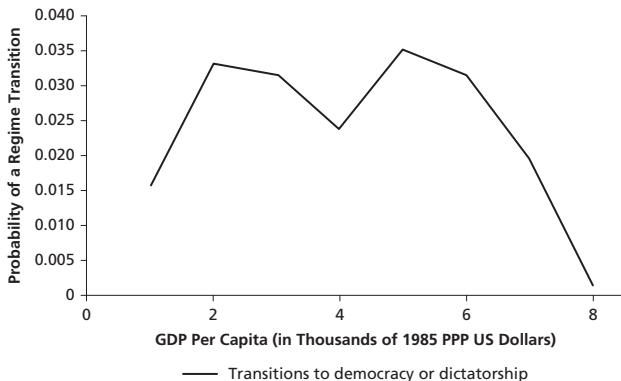
**FIGURE 6.4** Country Years under Democracy and Dictatorship, 1950–1990
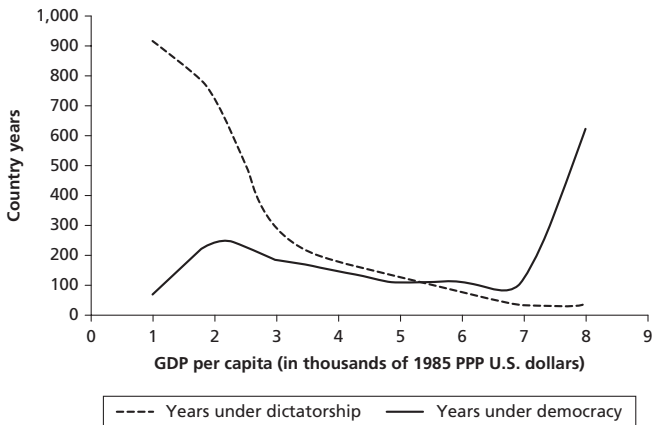
As predicted by both stories, democracies are more common in rich countries than in poor countries.

FIGURE 6.5 | Probability of Regime Transitions as a Function of Income, 1950–1990

Income has relatively little effect on the probability of a regime transition.

But we should examine the effect of increased income on transitions to democracy and transitions to dictatorship separately.

FIGURE 6.6

**Probability of Transitions to Democracy and Dictatorship as a Function of Income, 1950–1990**
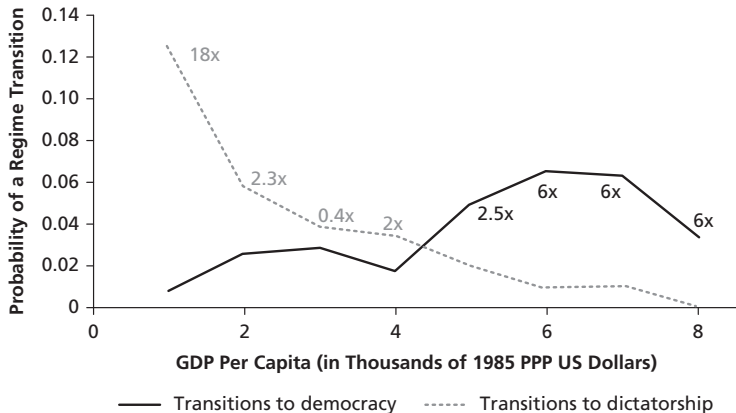
The kind of transition a country experiences is a function of income.

| TABLE 6.2 | Modernization Theory and the Survival Story: A Summary of the Evidence |
|---|---|

| Modernization theory and survival story | |
|---|---|
| 1. Democracy is more common in rich countries than poor countries: YES | |
| 2. Transitions to dictatorship become less likely as income increases: YES | |

| Modernization theory | Survival story |
|---|---|
| 3a. Transitions to democracy become more likely as income increases: YES | 3b. Transitions to democracy are unaffected by increases in income: NO |
| 4a. Regime transitions may or may not become less likely as countries become richer: YES | 4b. Regime transitions become less likely as countries become richer: NO |

Additional income appears to increase both the emergence and survival of democracy, as predicted by classic modernization theory.

But what is the causal mechanism linking economic development and democracy?

A variant of modernization theory states that it is not income per se that encourages democratization, but rather the changes in the socioeconomic structure that accompany wealth in the modernization process.

This variant of modernization theory incorporates a predatory view of the state.

According to modernization theory, all societies move through a series of stages.

Specifically, we see a shift from a focus on agriculture to a focus on manufacturing and services.

Some scholars have argued that these changes in early modern Europe played a crucial role in the creation of representative government in England. Why?

Structural changes in the economy produced a shift in economic power away from traditional agricultural elites who controlled easily observable assets to a rising class of wool producers, merchants, and financial intermediaries who controlled assets that were more difficult to observe.

The key point is that the state can tax or predate on only those assets that they can observe (or count).

The increased ability of the gentry to hide their assets from state predation changed the balance of power between modernizing social groups and the traditional seats of power such as the Crown.

The Crown now had to negotiate with the new economic elites in order to extract revenue.

In return for paying their taxes, the economic elites demanded limits to state predation.

This resulted in the supremacy of Parliament over the Crown.

But why a stronger parliament?

A credible commitment problem or a time-inconsistency problem occurs when (i) an actor who makes a promise today may have an incentive to renege on that promise in the future and (ii) power is in the hands of the actor who makes the promise and not in the hands of those expected to benefit from the promise.

The establishment of a strong parliament is designed to solve the credible commitment problem by keeping power in the hands of the recipient of the promise.

The introduction of a more limited state occurred earlier and more definitively than it did in France.

This was because of the unique structure of the economy that early modernization had produced in England.

<span style="color:red">Exit, voice, and loyalty game.</span>

In the prehistory of the game, the Crown has confiscated the assets of a segment of the elite represented by Parliament.

<span style="color:red">The Parliamentarians have three options.</span>

1. EXIT: Disinvest from the economy.

2. VOICE: Petition the Crown for protection against future confiscations in exchange for a promise to continue investing in the economy.

3. LOYAL: Keep investing and paying taxes.

**FIGURE 6.7** | Exit, Voice, and Loyalty (EVL) Game without Payoffs between the Parliamentarians and the Crown

**Parliamentarians**

*Exit: Disinvest*      *Voice: Demand limits*      *Loyalty: Invest*

O1: Unlimited government, stagnant economy

O2: Unlimited government, growing economy

**Crown**

*Respond: Accept limits*      *Ignore: Reject limits*

O3: Limited government, growing economy

**Parliamentarians**

*Disinvest*      *Invest*

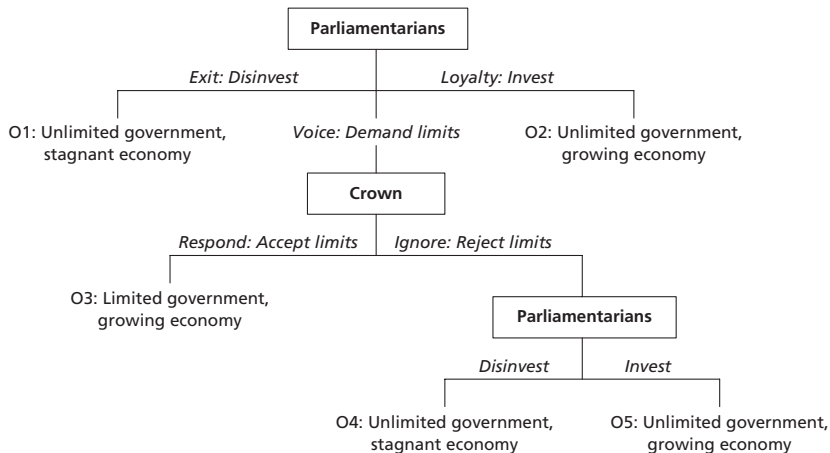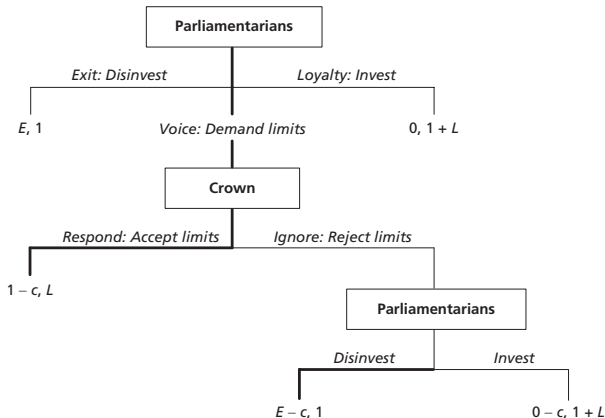O4: Unlimited government, stagnant economy

O5: Unlimited government, growing economy

**FIGURE 6.8** Solving the EVL Game When the Parliamentarians Have a Credible Exit Threat, *E* > 0, and the Crown Is Dependent, *L* > 1

Parliamentarians

*Exit: Disinvest* — *Loyalty: Invest*

$E, 1$     *Voice: Demand limits*     $0, 1 + L$

Crown

*Respond: Accept limits* — *Ignore: Reject limits*

$1 - c, L$

Parliamentarians
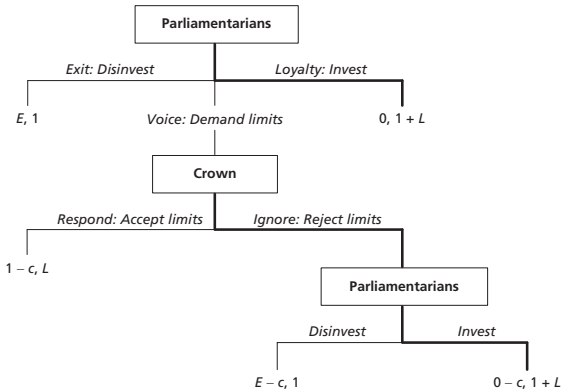
*Disinvest* — *Invest*

$E - c, 1$     $0 - c, 1 + L$

The subgame perfect equilibrium is (Demand limits, Disinvest; Accept limits).

The Crown in England was dependent on the Parliamentarians for revenue, $L > 1$. The Parliamentarians had mobile assets, $E > 0$.

**FIGURE 6.9** Solving the EVL Game When the Parliamentarians Do Not Have a Credible Exit Threat, $E < 0$, and the Crown Is Dependent, $L > 1$

The subgame perfect equilibrium is (Invest, Invest; Reject limits).

The Crown in France was dependent on the Parliamentarians for revenue, $L > 1$. The Parliamentarians did **not** have mobile assets, $E < 0$.

The English monarchy in early modern Europe accepted limits on its predatory behavior because it depended on elites with credible exit threats (mobile assets).

The French monarchy in early modern Europe did not accept limits on its predatory behavior because it depended on elites who did not have credible exit threats (fixed assets).

| TABLE 6.3 | Summary of Outcomes in the Exit, Voice, and Loyalty Game | |
| --- | --- | --- |
| | **Crown** | |
| | **Is autonomous** | **Is dependent** |
| **Parliamentarians** | $L < 1$ | $L > 1$ |
| Have a credible exit threat (mobile assets) $E > 0$ | *Poor dictatorship* (unlimited government, stagnant economy) | *Rich democracy* (limited government, growing economy) |
| Have no credible exit threat (fixed assets) $E < 0$ | *Rich dictatorship* (unlimited government, growing economy) | *Rich dictatorship* (unlimited government, growing economy) |

Representative government is more likely to emerge and survive when the rulers of a country depend on a segment of society consisting of a relatively large number of people holding liquid or mobile assets.

**Barrington Moore:** "No bourgeoisie, no democracy."

**Hobbes** saw the creation of a strong state as a solution to the security dilemma between individuals in the state of nature.

One problem with this solution was that individuals now had to worry about being predated upon by a strong state.

Our variant of modernization theory indicates that there are conditions – a state dependent on citizens with credible exit threats – under which states will voluntarily agree to limit their predatory behavior.

How do natural resources influence the democratization process?

According to the political resource curse, countries that depend on revenue from natural resources, such as oil, diamonds, and minerals, will find it difficult to democratize. They are also more prone to corruption, poor governance, and civil war.

<span style="color:red">Demand-side explanations</span> emphasize how resource revenues reduce both the citizens' demand for democratic reform and government responsiveness to that demand.

Resource revenues mean that taxes are low and governments are autonomous from citizen demands.

**Supply-side explanations** focus on how resource revenues enable dictators to resist pressure to democratize and help them to consolidate their hold on power.

Resource revenues can be distributed as patronage to preempt or coopt opposition groups, or used to repress them.

When it comes to the political resource curse, resource dependence is more important than *resource abundance*.

The political resource curse is about the emergence of democracy, not the *survival of democracy*.

How does foreign aid influence the democratization process?

Aid optimists think that foreign aid can spur democratization efforts.

Aid pessimists think that foreign aid has a negative effect on democratization reforms.

Foreign aid can hurt democratization efforts.

By freeing governments from the need to raise taxes and providing them with access to 'slack resources' that can be strategically used to reward supporters and coopt opposition groups, foreign aid increases the autonomy of recipient governments from the demands of their citizens.

Is there a foreign aid curse?

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Foreign aid can help democratization efforts, but only if:

1. the recipient country is dependent on foreign aid;

2. the aid donor wants to promote democratic reform;

3. the aid donor can credibly threaten to withdraw the aid if its demands for reform are not met.

Any democratic reforms that do occur are likely to be limited in scope.

How does economic inequality influence the democratization process?

It is commonly argued that economic inequality undermines democracy.

The possibility that the poor would expropriate the rich through the ballot box makes democracy appear costly to elites.

As a result, they often step in to block attempts at democratization – right-wing coups.

However, the empirical support for this line of reasoning is quite weak.

Our variant of modernization theory suggests that economic elites do not need to worry that the poor will expropriate them if they have credible exit threats.

Economic inequality should only be bad for democratization in those countries where the economic elites do not have credible exit threats.

Recent evidence that land inequality is bad for democracy but that income inequality is not.

Our variant of modernization theory suggests that democracies should produce reasonably good economic performance.

There will be greater heterogeneity in economic performance among dictatorships.

Some dictatorships will perform well, while others will perform poorly.

Political scientists often use statistical analyses to evaluate their theoretical claims.

The starting point for most statistical analyses is a theoretically-derived hypothesis.

A hypothesis makes a falsifiable claim about the world.

A hypothesis links a dependent variable to an independent variable.

A <span style="color:red">dependent variable</span> is an outcome or thing we want to explain.

An <span style="color:red">independent variable</span> is what we think will explain or determine the value of the dependent variable.

Hypothesis: An increase in $X$ (independent variable) leads to an increase in $Y$ (dependent variable).

Democratization Hypothesis: More economic development is associated with higher levels of democracy.

To evaluate a hypothesis, we must first collect data on $X$ and $Y$ for each of our units of analysis.

The <span style="color:red">units of analysis</span> refer to the entities that we're talking about in our theory.

Once we have the relevant data, we put them into a spreadsheet so that we can start the statistical analysis.

A spreadsheet essentially stores data in a tabular form.

We typically refer to the information in a spreadsheet as the data set.

| TABLE 6.7 | A Snapshot of a Data Set | |
|---|---|---|
| Observation | Y | X |
| 1 | 0.92 | 0.50 |
| 2 | 0.71 | 0.96 |
| 3 | 3.24 | 2.37 |
| ⋮ | ⋮ | ⋮ |
| 98 | 0.44 | 0.13 |
| 99 | 2.80 | 1.65 |
| 100 | 2.28 | 1.63 |
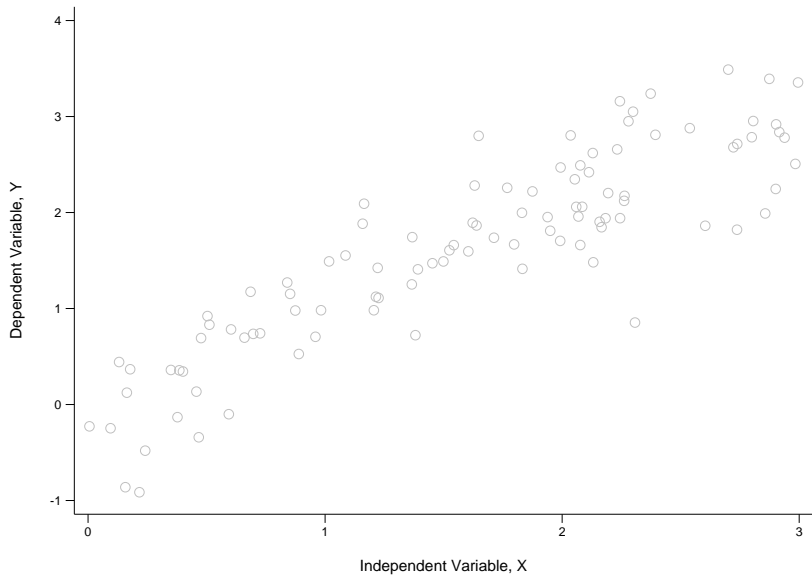
There appears to be a positive relationship between $X$ and $Y$.

But not all observations with a high value of $X$ have a high value of $Y$, and not all observations with a low value of $X$ have a low value of $Y$.

To better summarize the observed relationship between $X$ and $Y$, we could add a line that 'best fits' the cloud of data points.

Y-axis: Dependent Variable, Y

X-axis: Independent Variable, X
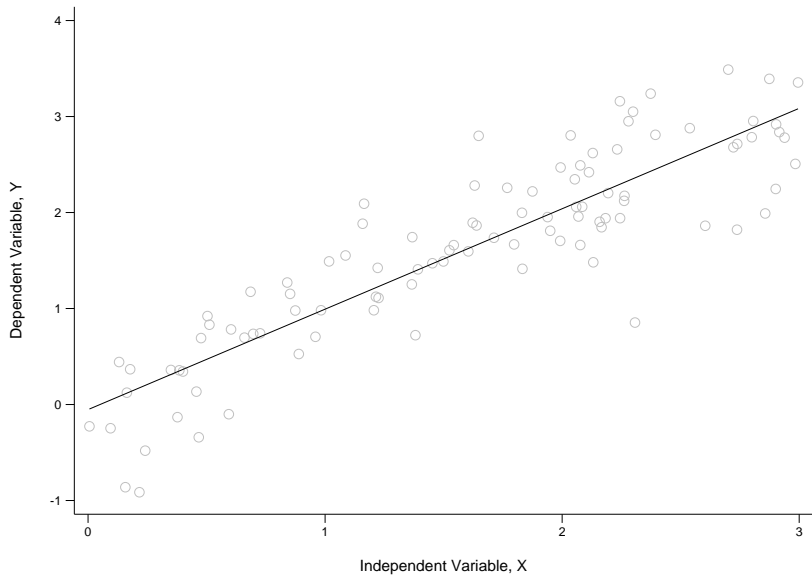
The equation for a line is:

$$Y = mX + b$$

$m$ is called the coefficient and indicates the slope of the line.

$b$ is called the constant and indicates the value of $Y$ when $X$ is 0.

The equation for a line is:

$$Y = mX + b$$

$m > 0$ indicates that the line slopes up and to the right, suggesting a positive relationship between $X$ and $Y$.

$m < 0$ indicates that the line slopes down and to the right, suggesting a negative relationship between $X$ and $Y$.

$m = 0$ indicates a horizontal line, suggesting that there is no relationship between $X$ and $Y$.

Y = 1.05 X - 0.05
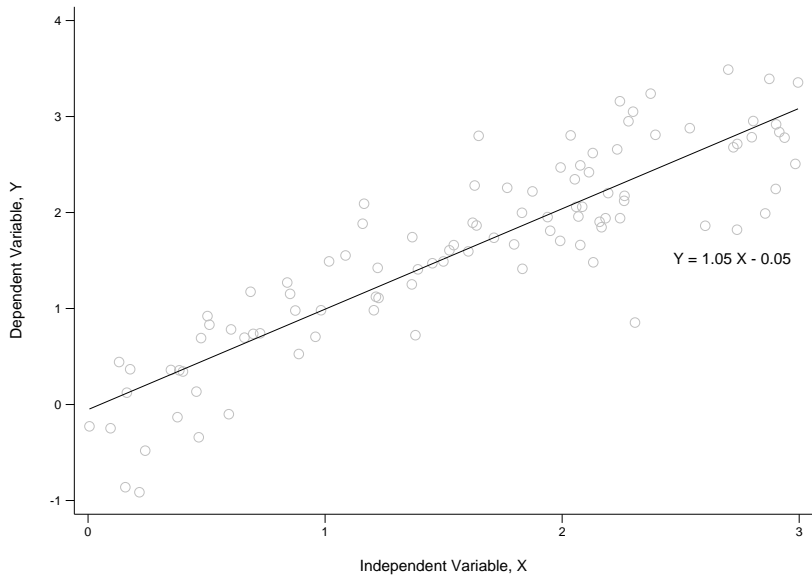
| | | |
|---|---|---|
| **TABLE 6.8** | **A Table of Statistical Results Capturing the Pattern Shown in Figure 6.10** | |

| Independent Variables | Model 1 | |
|---|---|---|
| X | 1.05*** ←——— Coefficient, m | |
| | (0.06) | |
| Constant | –0.05 ←——— Constant, b | |
| | (0.10) | |
| Number of Observations | 100 | |

***$p < 0.01$

The coefficient tells us the slope of the relationship between some independent variable, $X$, and the dependent variable, $Y$.

The standard error is a measure of uncertainty and gives us a sense of how sure we are that the 'best-fit' line we find in our data reflects a more general relationship between $X$ and $Y$.

There appears to be a positive relationship between $X$ and $Y$.

But how confident are we that we've identified a real relationship that is not driven by the peculiarities of our data?

A significance test is used to see how likely it is that we've identified a real relationship or pattern in our data.

Step 1: Measure the strength of the pattern in the data.

Step 2: Ask whether the pattern is strong enough to be believed.

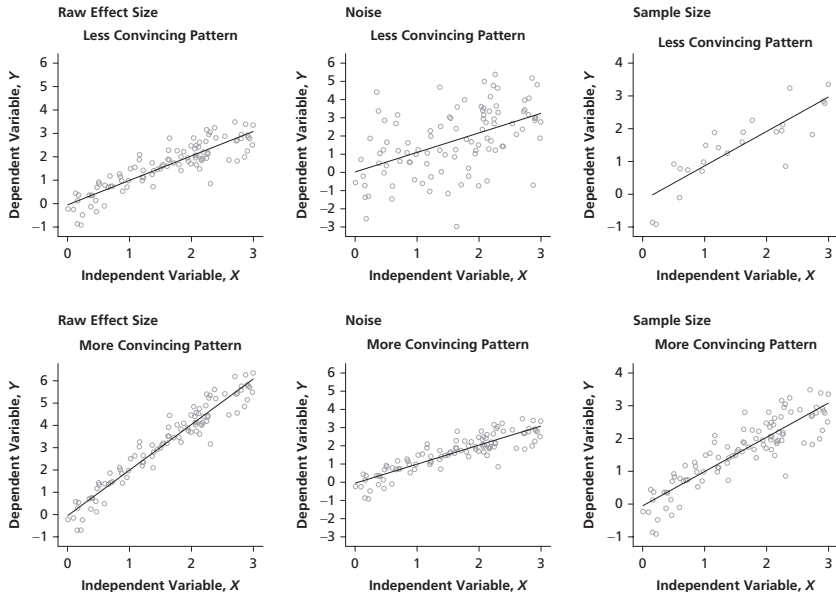Step 1 requires calculating a test statistic, T.

In our particular example, the test statistic is equal to the coefficient divided by the standard error.

The key point is that the larger the test statistic, the stronger the pattern in the data.

At least three factors influence the strength of the pattern in our data:

1. the raw effect size

2. the amount of noise in the data

3. the amount of data in our sample

FIGURE 6.11    Intuitive Ideas about the Strength of Patterns in Our Data



**Raw Effect Size**
**Less Convincing Pattern**

**Noise**
**Less Convincing Pattern**

**Sample Size**
**Less Convincing Pattern**

**Raw Effect Size**
**More Convincing Pattern**

**Noise**
**More Convincing Pattern**

**Sample Size**
**More Convincing Pattern**

Step 2 involves calculating something called a $p$-value.

A $p$-value indicates the probability of observing a pattern as strong (or stronger) than the one we see in the data set ($T$) if, in fact, there were no pattern in general.

When the $p$-value is very small, we rule out the possibility that the pattern we observe in our data occurred by chance.

Political scientists often use cutoffs in the $p$-value to determine whether they have identified a statistically significant relationship.

For example, it is common for us to say that we've identified a 'statistically significant' relationship if the $p$-value associated with a test statistic for a particular variable, $X$, is less than 0.05.

To help readers determine if a particular pattern in the data, such as a slope coefficient, is statistically significant, we often place stars next to the relevant coefficient in the table of results.

If a pattern is not considered statistically significant (no stars), then we are saying that we do not consider the $p$-value to be sufficiently small for us to rule out the possibility of no relationship between $X$ and $Y$.

In other words, we are unwilling to rule out the possibility that the pattern we observe in the data may have arisen by chance.

How does a country's status as an oil producer, its income, and its economic growth affect the probability that it will *become* a democracy?

TABLE 6.4 **Economic Determinants of Democratic Emergence**

**Dependent variable: Probability that a country will be a democracy this year if it was a dictatorship last year.**

| Independent Variables | 1946–1990 | 1946–1990 | |
|---|---|---|---|
| GDP per capita | 0.00010*** | 0.00010*** | ← Coefficient |
| | (0.00003) | (0.00003) | ← Standard error |
| Growth in GDP per capita | | –0.02*** | |
| | | (0.01) | |
| Oil production | | –0.48** | |
| | | (0.24) | |
| Constant | –2.30*** | –2.27*** | |
| | (0.09) | (0.09) | |
| Number of observations | 2,407 | 2,383 | |
| Log-likelihood | –233.01 | –227.27 | |

**p < 0.05$; ***$p < 0.01$

## Emergence of Democracy

- Increased income makes democratic transitions more likely.

- Increased economic growth makes democratic transitions less likely.

- Oil production makes democratic transitions less likely.

How does a country's status as an oil producer, its income, and its economic growth affect the probability that it will *remain* a democracy?

TABLE 6.5

## Economic Determinants of Democratic Survival

**Dependent variable: Probability that a country will be a democracy this year if it was a democracy last year.**

| Independent Variables | 1946–1990 | 1946–1990 |
|---|---|---|
| GDP per capita | 0.00020*** | 0.00020*** |
| | (0.00004) | (0.00004) |
| Growth in GDP per capita | | 0.04*** |
| | | (0.01) |
| Oil production | | –0.21 |
| | | (0.269) |
| Constant | 1.13*** | 1.12*** |
| | (0.13) | (0.13) |
| Number of observations | 1,584 | 1,576 |
| Log-likelihood | –149.71 | –144.11 |

***$p < 0.01$

## Survival of Democracy

- Increased income makes democratic survival more likely.

- Increased economic growth makes democratic survival more likely.

- Oil production has no effect on democratic survival.

| TABLE 6.6 | Estimated Value of Oil and Gas Produced Per Capita in 2009 in Current Dollars |
| --- | --- |

| Country | Oil Income Per Capita (2009 Dollars) |
| --- | --- |
| Qatar | $24,940 |
| Kuwait | $19,500 |
| United Arab Emirates | $14,100 |
| Oman | $7,950 |
| Saudi Arabia | $7,800 |
| Libya | $6,420 |
| Bahrain | $3,720 |
| Algeria | $1,930 |
| Iraq | $1,780 |
| Iran | $1,600 |
| Syria | $450 |
| Yemen | $270 |
| Egypt | $260 |
| Tunisia | $250 |