

First Quiz:

Subject: Chapters **1 through 4** of the textbook.

Review the material covered:

- Book
- Lecture Notes 1 through 7. The last file to be included in the quiz is: 100-7Chapter4&5_6thed.pdf. Notes are posted at:
<http://www.me.unlv.edu/Undergraduate/courses/notes/egg102/100mat.htm>
- Your class notes

Chapter 1 revisited:

- 1.Ethics discussion (the Homework case studies)
- 2.Engineering Ethics: How can you respond to an unethical request?

Case Study 1: A TOURIST PROBLEM

The level of pollution in the plant's water discharges slightly exceeds the legal limitations. Solving the problem will cost the plant more than \$200,000.

Marvin's supervisor says the excess should be regarded as a mere "**technicality**," and he asks Marvin to "adjust" the data so that the plant appears to be in compliance.

Case Study 1: A TOURIST PROBLEM

How should Marvin respond?

We consult a noted
Philosopher:



Immanuel Kant's

Categorical Imperative:

"Act so that the maxim [determining motive of the will] may be capable of becoming a universal law for all rational beings."

Case Study 1: A TOURIST PROBLEM

Misguided loyalty?

Refer to the professional Code of Ethics

While principled loyalty can be a commendable virtue, misguided loyalty has been responsible for many, many tragic moral disasters.

The basic pattern of Ethics failure never changes:

In Classical Greek: **Hybris**

Hybris is the arrogance that blinds.

**Recommended
reading:**

Sophocles

**King Oedipus
(Οιδιπους
τυραννος)**

Antigone



Oedipus and the Sphinx.



Only the blind man (Teiresias) sees the truth.

Close to Home

An ethics case quoted from the Las Vegas
Review-Journal: Feb. 7, 2005

**JANE ANN MORRISON: Land swaps, then
and now:**

...In 1996, the inspector general's report concluded that taxpayers in Nevada were shortchanged by \$12 million in just four specific land swaps...

JANE ANN MORRISON: Land swaps, then and now (continued):

...An ad is published saying the county wants to get rid of acreage near the airport, but it can **only be used for a cemetery**. Only one man applies for a land exchange: Scott Gragson, grandson of former Mayor Oran Gragson. Then the **restriction disappears**, and land that Scott Gragson paid \$2 million to get is quickly sold for **\$7 million** to commercial developers, giving him a tidy profit of \$5 million....

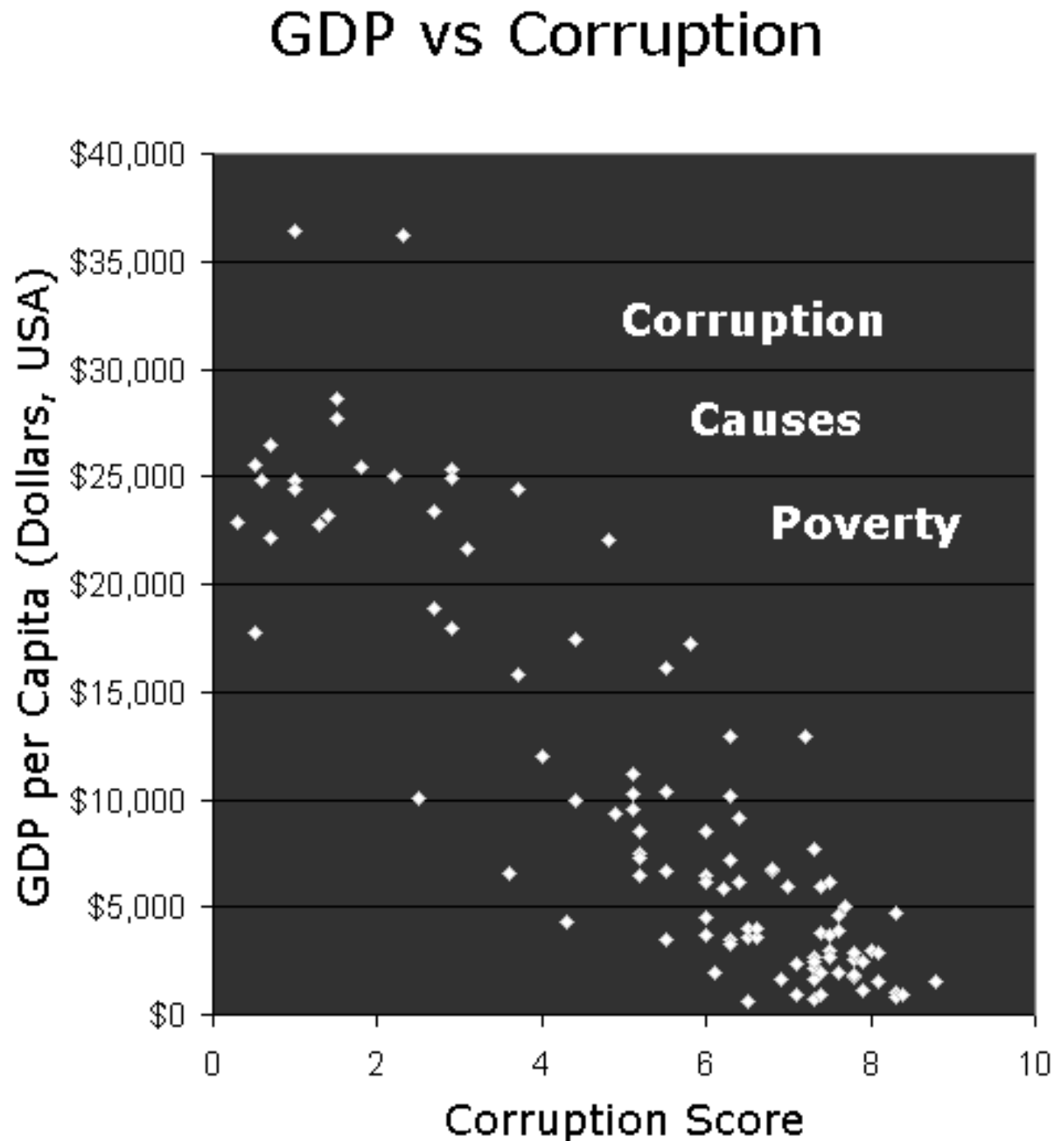
The cost of Ethics failure:

Why are some economies doing well, others mired in poverty?

The cost of
Ethics
failure:

Corruption
causes
Poverty

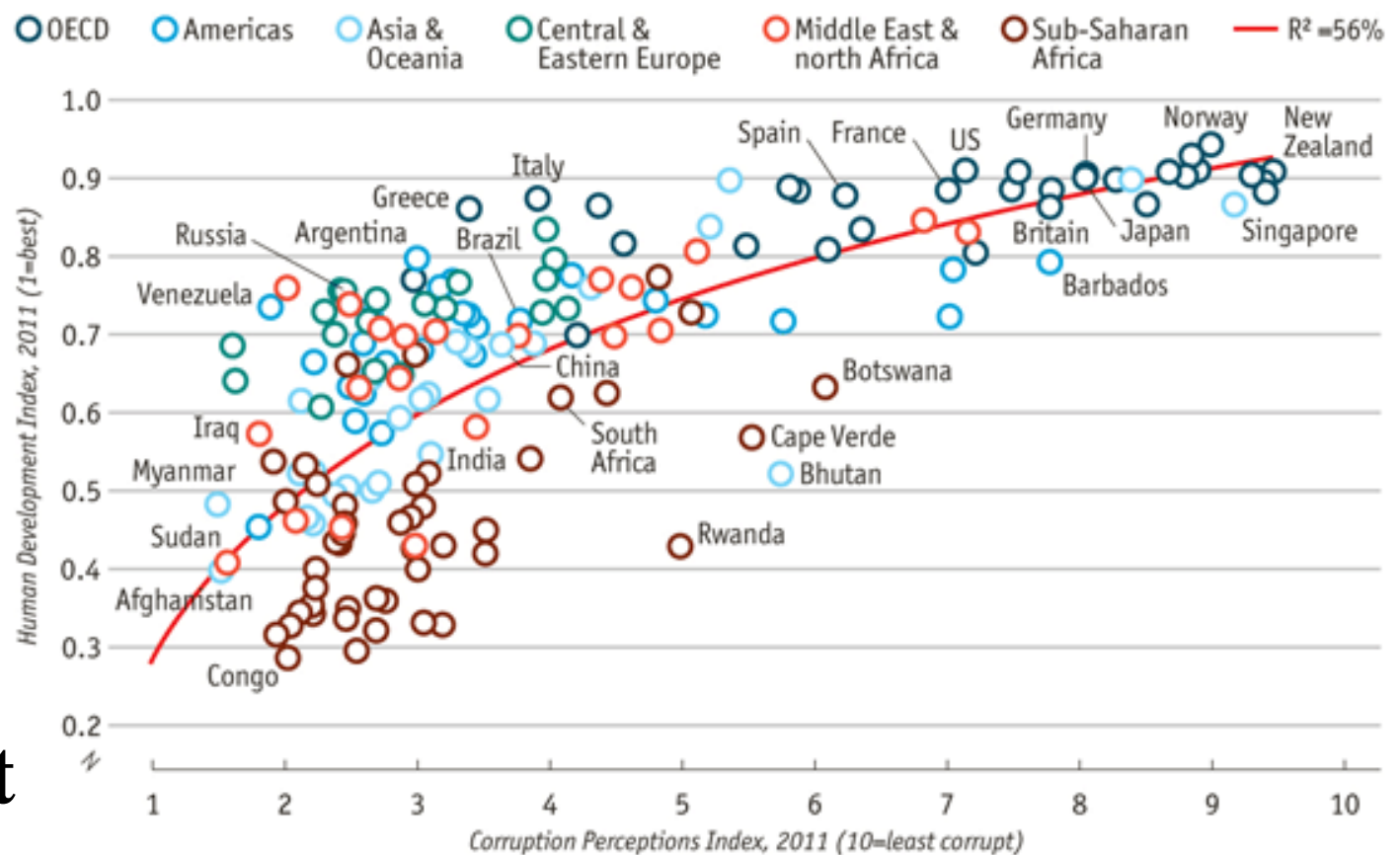
GDP data from: CIA, Year 2000
Corruption Score is based on
the TI Corruption Perceptions
Index 2002, available at
<http://www.transparency.org/>



Corrosive corruption :

A
correlation
between
corruption
and
development

Corruption and human development



Sources: Transparency International; UN Human Development Report

Dec 2nd 2011,
The Economist

Case Study 2: SUNNYVALE

Joan Dreer will be the first woman engineer at Sunnyvale. On learning that their new supervisor will be a woman, several of the engineers inform Jim Grimaldi that they don't like the idea of a woman supervising their work.

Case Study 2: SUNNYVALE

What should Jim Grimaldi (Joan's supervisor) do? What are the ethical issues involved, and how should they be approached?

Case Study 2: SUNNYVALE

Consider the charged atmosphere on both sides.

- Joan: Prior Harassment
- Engineers: Unfamiliar new Setting (see Lea Stewart's comments)