How the U.S. Economy Works

**This Is Also How the U.S. Economy Works**
... again not healthy over the long run when SPEND > EARN

**How Does the Colorado Springs Area Economy Work?**

- Buyers of Goods and Services Outside the County
- EARN: Buyers Outside the County Purchase U.S. Goods (lower)
- BORROWING required
- EARN: Buyers Outside the County Purchase U.S. Goods (lower)
- Outside of Goods and Services
- U.S. $ to Many Sellers Outside the Country (more & more)
- Borrowing is required to provide the balancing influx of dollars into the economy
- EDCC presentation 1/28/03
- modified to comment on the U.S. economy

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**Outline**

- Systems Thinking (Bob)
- Economic Trends - Behavior over Time (Bob)
- Systems Structure (Dave & Bob)
- Expectations (Dave)
- Group Dialogue: Adding other influences & structure (Bob)
- Group Policy Prescription Suggestions (Dave)
- Evaluating Consensus (Bob)
- Final Comments / Wrap-Up (Mary)

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**Summary of Effects**

- Positive effects produced by balancing loops:
  - Lower outsourced wages reduces price levels and increases purchasing power that can be used for additional purchasing and investment, increasing economic growth.
  - Some outsourced wages are spent in the U.S.

- Negative effects produced by reinforcing loops:
  - Replacement jobs on average don't pay as much as the jobs lost, which reduces wages and U.S. purchasing power.
  - Wages are depressed in sectors affected by low-wage job competition.
  - An increasing number are not finding new jobs.
  - There are increasingly long delays finding new jobs.
  - Percentage of outsourced wages spent in U.S. is falling.

- Observed behavior: an exponentially-increasing “trade” deficit

- Reinforcing Loops: Exponentially-increasing or –decreasing, exploding or dying instability

- Balancing Loops: Exponentially approaching a “set point,” producing stability
Combined Effects So Far

1. Loss of U.S. Purchasing Power
   - Decrease in U.S. wages
   - Increase in worldwide outsourced wages
   - Decrease in in U.S. wages

2. Regained U.S. Purchasing Power
   - Increase in wages paid by companies
   - Decrease in the price of imported products
   - Increase in productivity

3. Company Outsource Cost Decrease
   - Decrease in number of outsourced company jobs
   - Increase in pay of displaced workers

4. Regained U.S. Purchasing Power from World Wages
   - Increase in the fraction of outsourced wages spent on U.S. products

5. Economic Growth Assist Finding New Jobs
   - Increase in the number of new jobs created
   - Decrease in the number of displaced workers

Systems Thinking

- **Key systems principle**: Behavior is a result of structure (stocks & flows and feedback)
- For example: When we see exponential growth, we ask, “What's the reinforcing feedback driving it?”

An Example of Structure

- "That place is too popular. Nobody goes there anymore.” Yogi Berra

A Popular Restaurant

- S = same direction
- O = opposite direction
Economic Trends
- Behavior Over Time -

Trade Deficit Data

Trade Deficit: It’s Exponential!

Trade Deficit Projection
Trade Deficit in Perspective

Trade Deficit Actual & Projected

Accumulated Deficit

Trade Deficit with China

Trade Deficit with China
Aside from Debt, what’s the Result? Selling Off America.


Is Oil the Problem? No.

Jobs: Manufacturing
Dec 00 to Sept 06: -39,000

Jobs: Telecommunications
Jan 01 to Sept 06: -21,100
**Jobs: Info Tech**
Jan 01 to Sept 06: -38,100

**Colorado: Information Jobs**

**Is Advanced Technology Our Salvation? No.**

**Trade in Advanced Technology Products**

**Is It Even “Trade”? No.**

*Outside Influence*
Exports by foreign-funded companies are taking up an increasing share of China’s total exports.

- Growth of real exports (white)
  \[ \sim \frac{320}{100} = \sim 3.2X \]

- Growth of exports by foreign-funded companies (blue)
  \[ \sim \frac{450}{70} = \sim 6.4X \]

*Source: National Bureau of Statistics*

From WSJ, 8/30/06 “In Strategic Shift, China Hits Foreign Investors With New Hurdles” at [http://online.wsj.com/article/SB11569057587649211.html](http://online.wsj.com/article/SB11569057587649211.html)

**Systems Structure**
The Drive to Offshore


• Harris Miller, president of the Information Technology Association of America, said companies could suffer if they are unable to use cheaper foreign workers to stay competitive. … The ITAA is monitoring the legislation in states around the country and helping organize business leaders to lobby against it. Companies need the flexibility to use cheaper, offshore workers to help them hold down costs, Miller said. Anxious About Outsourcing, States Try to Stop U.S. Firms From Sending High-Tech Work Overseas, Washington Post, 1/31/04, [http://www.washingtonpost.com/wp-dyn/articles/A64696-2004Jan30.html](http://www.washingtonpost.com/wp-dyn/articles/A64696-2004Jan30.html)
The Effect of Lower Prices: More Spending & Investing

- … the pure free-market answer … says the market will take care of itself. Productivity gains will eventually lead to job creation, and workers will learn to adapt.

- Diana Farrell, director of the McKinsey Global Institute:
  Those savings enable me, if I am an investor, to consume more and therefore contribute to job recreation, and if I am a company, to re-invest and create jobs. That’s important because I agree that we are migrating jobs away, some of which will never return, nor should they.

- … job growth eventually will resume, as aggregate demand bounces back.

Continuing Outsourcing Promotes Investing, Pushing Wages Back Up

Economic Growth Brings New Jobs

- In many ways, the economists’ argument for outsourcing is as straightforward as the case for importing products. If an Indian software programmer is paid a tenth of an American’s salary, a company that develops software in India will save money and provided competitors do the same — the price of its software will fall; productivity will rise, the technology will spread, and new jobs will be created to adapt and improve it.

- As lower-priced technology flooded the marketplace, it helped generate new jobs, as companies that snapped up computers suddenly required software and workers who could adapt the products to their needs. …

- Yet most economists agree that the impact on productivity, economic growth and jobs should be similar to that of the outsourcing of hardware in the late 1990’s. Prices of technology services will fall, technology will become more pervasive, and jobs will be created as businesses find new things to do with the technology.

A “Good Thing” … Workers Eventually Get Jobs … Better Jobs

• The movement, known as offshore outsourcing, is growing, Mr. Mankiw acknowledged. But he said it was “just a new way of doing international trade” and “a good thing” that would make the American economy more efficient and would free American workers to eventually get better jobs.


• Greenspan and Mankiw have also both advanced the argument that the jobs shipped overseas in manufacturing in recent years are not lost forever because a dynamic U.S. economy will produce new jobs in different fields.


Replacement & Temporary Jobs Pay Less

• Stephen S. Roach, managing director and chief economist of Morgan Stanley: Over the September to November [2003] period, employment has turned up, but many of those jobs came from the temporary hiring industry. These are service jobs, contingent workers without benefits and significantly lower pay scales.


• Temporary workers, in fact, are the fastest-growing segment of the work force, according to the Bureau of Labor Statistics. Since August, when employers finally began to add more jobs than they eliminated, temporary workers have led the parade. Temporary help jobs increased by 112,000 in this period, bringing the total to 2.37 million as of last month. That is up from virtually zero in the late 1970’s.

Temporary workers, and their first cousins, contract workers, play a crucial role in a growing corporate practice. Companies increasingly divide their work forces into a core group of permanent, well-paid employees surrounded by less-skilled, lower-wage workers who can be brought in and sent away as demand fluctuates.


Undermining U.S. Purchasing Power

• With all of the good paying manufacturing and tech jobs being exported overseas, who is going be able to afford to buy the computers, and blue jeans and running shoes? Not only could this create problems in the U.S., other countries could be hurt as well. As the income of U.S. consumers shrinks they will be able to afford fewer imports.


• The best research on what happens to people displaced from manufacturing is that they eventually find a new job, but they take an average wage cut of 13% to 14%. The people who are hit hardest are older workers. Also, it’s not just the worker who is directly displaced from a sector that is hurt by international trade, it is also every other worker in the economy who has a similar skills profile.

What's happening to pay? Here's Data on Productivity & Compensation

- Job creation all but stalled in February [2004], surprising Wall Street forecasters. The problems cut across much of the labor market. Manufacturers eliminated jobs for the 43rd consecutive month. Weekly wages for most of the workforce have risen less than 2 percent over the last year, roughly the rate of inflation. The average length of unemployment increased to 20.3 weeks, its highest level since 1964.
- In the last three months, more than 40% of the unemployed have been out of work more than 15 weeks. That's the worst number since 1983, and a sign that jobs remain very hard to find — which is what anyone who has lost a job will tell you.

One last statistic — not about jobs, but about wages. Since the last quarter of 2001, real G.D.P. has risen 7.2%. But wage and salary income, after adjusting for inflation, is up only 0.6%. This matches what the employer survey is telling us: America's workers have seen very little benefit from this recovery.

Jobs Not Keeping Up with Pop Growth

- Employment needed to keep up with population growth: 150,000
- Actual employment: 146,000
- Gap: 3.9M

Many Not Counted in Labor Force

- Persons not in the labor force, 1999 annual averages:
  - Want a job: 23.3% (4,649,000)
  - Don't want a job: 83.3% (15,848,000)
  - Marginal workers (1.2M)
  - Discouraged workers (273,000)

From: Labor Supply in a Tight Labor Market
Measures of Unemployment

- U-3 Total unemployed, as a percent of the civilian labor force (official unemployment rate)
- U-4 Total unemployed plus discouraged workers, as a percent of the civilian labor force plus discouraged workers
- U-5 Total unemployed, plus discouraged workers, plus all other marginally attached workers, as a percent of the civilian labor force plus all marginally attached workers
- U-6 Total unemployed, plus all marginally attached workers, plus total employed part time for economic reasons, as a percent of the civilian labor force plus all marginally attached workers

**NOTE:**

Marginally attached workers are persons who currently are neither working nor looking for work but indicate that they want and are available for a job and have looked for work sometime in the recent past. Discouraged workers, a subset of the marginally attached, have given a job-market related reason for not currently looking for a job. Persons employed part time for economic reasons are those who want and are available for full-time work but have had to settle for a part-time schedule.

For further information, see “BLS introduces new range of alternative unemployment measures,” in the October 1995 issue of the Monthly Labor Review.

Unemployment: Official, Effective, Real

- U.S. Unemployment Level

Some Outsourced Wages Spent in U.S. ... just less and less

- In past recoveries, companies stepped up their hiring in response to two other dynamics. As the economy improved, they invested in new machinery, computers and other capital goods to meet rising demand. The capital goods manufacturers in turn added workers who then spent their salaries on goods and services, and employment rose in these sectors, too.

- The same dynamic is happening now, but a growing portion of the spending is going abroad, creating jobs in other countries rather than the United States. That is because the value of imported capital goods, measured as a percentage of total expenditures, excluding cars and trucks, rose to just under 40 percent last year from just over 30% in 1990 and 15% in 1980. Similarly, spending on imported consumer goods and services [rose] as a percentage of total outlays stands at 12% today, up from 7% in 1990 and 4% in 1980.

Outsourced Wages Spent on U.S. Products, but Less #

Combined Effects So Far

Summary of Effects

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• Recall observed behavior: an exponentially-increasing “trade” deficit
• Reinforcing Loops: Exponentially-increasing or –decreasing, exploding or dying instability
• Balancing Loops: Exponentially approaching a “set point,” producing stability

Looking at the Macro Picture

• Companies making individually-logical decisions
• A global glut of capacity & supply
• A virtually unlimited supply of low-wage workers
• Technology that allows access to them
• Policies that encourage their use
“Reverse-Protectionist” Policies

- Companies defer paying foreign subsidiary income taxes - indefinitely.
- Tax loopholes, such as moving headquarters to a tax haven.
- Allowing R&D and other investment tax credits for companies that move manufacturing offshore - the U.S. doesn't fully benefit.
- Corporations engage in flawed transfer pricing schemes to avoid U.S. taxes, e.g., they sell components to foreign subsidiary with very low profit markup, and buy back product after manufacture with a very high foreign profit markup.
- No labor & environmental standards in trade pacts. Environmental degradation & worker injury costs are externalized. Democracy is undermined: individuals don’t value and “purchase” clean environment & workplace safety, governments do. Governments that aren’t democracies don’t represent the interests of its citizens.
- Corporations write-off the costs of shutting down U.S. factories when transferring work to foreign factories.
- Corporations write-off the costs of bringing new foreign employees to the U.S. and requiring its U.S. employees, as their last duties before being fired, to train the foreign employees to do their jobs.

What’s the Effect of Living in a World with A Global Glut of Capacity & Supply?


They summarized:
- “Businesses can produce far more than we need. Supply has simply outstripped demand. When that happens, production slows, equipment sits idle, costs go up, workers are laid off and investments are postponed.
- The capacity glut exists on a scale that this country and many others haven’t seen for decades, and it at least partially explains why it is so difficult for the American economy to shake off a recession that by all measures seemed mild.”
- This is a result of being in the trough of what’s known as the “long wave.”
Combined Effects of All Reduces Total Pay in the U.S.

... Creating More Price Competition and Reinforcing Loops (R3 & R4) Powering Offshoring

... and Creating an Exponentially-Increasing Trade Deficit

Remember: Trade Deficit: It’s Exponential!
How a Local Economy Works

The Economy Needs More $ Coming In than Going Out to Be Healthy

How Does the Colorado Springs Area Economy Work?

**Earn**

- Buyers of Goods and Services Outside of the County

**Spend**

- Outside Sellers of Goods and Services

Primary (Basic) Employers import wealth by exporting goods and services.

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The Fallacy Of Composition

- “When we act as if what is true for a part is true for the whole.”

- There are times when individually logical actions are collectively irrational.

How the U.S. Economy Works

This Is Also How the U.S. Economy Works … again not healthy over the long run when SPEND > EARN

How Does the Colorado Springs Area Economy Work?

**Earn**

- Buyers Outside the Country Purchase U.S. Goods (fewer)

**Spend**

- U.S. $ to Many Sellers Outside the Country (more & more)

BORROWING required

Primary (Basic) Employers import wealth by exporting goods and services.

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modified to comment on the U.S. economy

This Will Continue until Reinforcing Loops (R5 & R6)

Increase Offshore Labor Demand Compared to Supply
Corporations Oppose Increased Wages and Improved Working Conditions in China

- SHANGHAI, Oct. 12 - China is planning to adopt a new law that seeks to crack down on sweatshops and protect workers’ rights by giving labor unions real power for the first time since it introduced market forces in the 1980′s.

The move, which underscores the government’s growing concern about the widening income gap and threats of social unrest, is setting off a battle with American and other foreign corporations that have lobbied against it by hinting that they may build fewer factories here.

- China’s economy has become one of the most robust in the world since the emphasis on free markets in the 80′s encouraged millions of young workers to labor for low wages at companies that made cheap exports. As a result, foreign investment has poured into China.

- Some of the world’s big companies have expressed concern that the new rules would revive some aspects of socialism and borrow too heavily from labor laws in union-friendly countries like France and Germany.

- The Chinese government proposal, for example, would make it more difficult to lay off workers, a condition that some companies contend would be so onerous that they might slow their investments in China.

- [China’s] government seems determined to give its union new powers to negotiate worker contracts, safety protection and workplace ground rules.

- Hoping to head off some of the rules, some American companies are waging an intense lobbying campaign to persuade the Chinese government to revise or abandon the proposed law.

- The skirmish has pitted the American Chamber of Commerce - which represents corporations including Dell, Ford, General Electric, Microsoft and Nike - against labor activists and the All-China Federation of Trade Unions, the Communist Party’s official union organization.

- “You have big corporations opposing basically modest reforms,” said Tim Costello, an official of the group [Global Labor Strategies] and a longtime labor union advocate. “This flies in the face of the idea that globalization and corporations will raise standards around the world.”

The World Bank Discourages Countries from Enforcing ILO Labor Standards


Excerpt:

- “This year’s edition [of the World Bank’s major report] appears to discourage countries from upholding established standards of worker rights as set by the International Labor Organization …

- The report ranks countries on various indices of the ease of doing business including Employing Workers.” In this category, countries which do not have a minimum wage and do not restrict the number of hours an employee can work are ranked high.

- Rewarding lax or non-existent labor standards contradicts ILO policy, which encourages countries to establish a minimum wage and regulate hours of work and to pass and enforce laws protecting freedom of association and collective bargaining …

- The mission of the World Bank is to alleviate poverty. We fail to see how praising countries for failing to guarantee a minimum wage and overtime pay lifts people out of poverty.”

Foreign Pay Could Purchase U.S. Goods, but Why Would It, Given We Don’t?

- Nothing increases exponentially forever.
- What can’t go on forever will stop.
- In this case, when the rest of the world decides to stop taking U.S. dollars.
- Value of Dollar Drops Precipitously … Producing an Economic Depression?
- Discussion: Agree? Disagree? What do you think?
Group Dialogue: Adding Other Influences & Structure

Group Policy Prescription Suggestions
• What should be done? Suggestions?
• Warren Buffett advises focus on outcomes:
  Promote “even trade” or “balanced trade”
• Other Ideas? Post & Cluster.

Evaluating Consensus
• Inquiry
• Advocacy
• Proportional Voting to determine Group Ranking of policy & action suggestions.

Final Comments / Wrap-Up (Mary)