Offshore Outsourcing
The Offshoring Debate

1. Traditional Theory
2. What’s different now?
3. How does this affect
   – The ‘Job Thiefs’ (India, China, former USSR)?
   – The ‘Victims’ (America, Europe)?
4. What should we do?
5. Should we just do nothing?
Why do we like trade?
(which includes firms being able to move tasks to wherever they want)

United States

Produces
- Saxophones
- Fire Trucks

No Trade

can only consume what we produce
Why do we like trade?

Open Trade allows us to make all firetrucks and trade them all for sax's if we want!

All the combinations of production and consumption now made possible by trade are represented by:

\[ P_s Q_s + P_f Q_f = V \]

\[ Q_s = \frac{V}{P_s} - \left( \frac{P_f}{P_s} \right) Q_f \]

\[ Q_f' = \frac{V}{P_s'} - \left( \frac{P_f}{P_s'} \right) Q_f' \]

slope = \(-\frac{P_f}{P_s}\)
Why do we like trade?

We get more saxophones and firetrucks, for doing nothing but open trade!
Is this the same model as that used to understand offshoring?

Or is there something different going on?
Traditionally Yes, The Model Applies to Jobs Too

• We can reap the benefits of, for instance, low cost technical support offshored to India
• How?
• By doing nothing more than choosing to offshore
But, when discussing offshoring, we just focus on one aspect of the trade model:

- Same model applies, now we focus on: Who is it that is losing their job??

And how angry are they?
Visualizing the changes in job loss

Productivity Gap
(Us Prod - China Prod)
in US $

Real World Wage Gap
(US avg wage - China avg wage)
in US $

United States

productivity of US firms relative to China

Sectors
(decreasing competitiveness)

Airplanes

borderline sector

Nikes

Made in USA

Made in China
United States

Productivity Gap (Us Prod - China Prod) in US $

Real World Wage Gap (US avg wage - China avg wage) in US $

- prod Chinese firms shipping to US, taking trade costs into account
- prod US firms shipping to China, taking trade costs into account

Sectors (decreasing competitiveness)

Made in USA | Made in Both | Made in China

Airplanes | Nikes
Productivity Gap (Us Prod - China Prod) in US $

Real World Wage Gap (US avg wage - China avg wage) in US $

Trade becomes less costly

United States

US LOSERS

US WINNERS

Sectors (decreasing competitiveness)

Made in USA

Made in Both

Made in China

borderline sectors
The “1st Unbundling”

- Separated consumption area from production area (factories from consumers)
- Traditionally, some sectors lost and some gained
  a) Textile workers lost their jobs [low skilled]
  b) Computer programmers got jobs [high skilled]

Can workers losing in (a) just shift to (b)?
If this was the case, the US would just perform higher value added services and no one would lose

- Is this the whole story today?
  - Are the high skill jobs safe?
Nope, we have a “2nd Unbundling”

- Allowed by a combo of new technology (low cost communication and codification of work) and the doubling of the world’s labor force
- Traditionally, low skilled jobs were associated w/ getting offshored
  - Today correlation doesn’t apply
    - Many high skilled jobs (radiology, accounting), can be offshored
    - Many low skilled jobs (taxi driving, friendly restaurant waiter) never will be
  - Service Sector offshoring is relatively new
    - Frightens people b/c it’s an important driver of our economy

- Suddenness of the change
  - China, India, former USSR joined world labor force over just a few years
  - Capital to Labor ratio fell 61%, giving power to employers, employees do not have time to adjust
Trade-Cost-adjusted productivity gaps after drop in communication costs

1. Jobs are safer
2. Jobs are lost
3. Jobs already not in US

Tasks/individual jobs (decreasing comp)

consultant
borderline sectors
software designer

Made in USA
Made in Both
Made in China
totally unpredictable!
Characterizing jobs under threat of offshoring:

- IT intense
- IT Transmittable output
- Codifiable tasks
- Little face-to-face interaction
  – (Van Welsum and Reif 2005)

- How will this affect the labor force around the world?
India- (the receiving end)

- Chamarbagwala-
  - Demand for skilled labor goes up, returns to skills goes up
  - Increase in white-collar jobs, mainly in service sector
  - It is the result of trade and other reforms that generate demand for individuals who can implement these reforms
    - Such as individuals with managerial, professional, or technical skills
  - Other reforms include internal economic transformations such as deregulation and privatization
- Effects on Wage Gap
  - Manufacturing
    - Skilled Female demand up (not b/c of trade)
    - Skilled Male demand up
    - Unskilled Female demand down
    - Unskilled Male demand down
  - Services
    - Skilled Male demand up
    - Skilled Female demand up
    - Unskilled Male demand up (not b/c of trade)
    - Unskilled Female demand up (not b/c of trade)
- Conclusion: trade increases wage gap
The United States- (The dispensing end)

• Should the service sector be worried?
Manufacturing’s experience

- Results of engaging in trade (Lewis and Richardson book)
- Those losing jobs to offshoring
  - 70% find new job
  - 36% higher new earnings
  - 25% new earnings 30% lower
    - i.e. lower skilled manufacturing workers
  - On avg, new weekly earnings lower
Service Sector’s experience to date

The Bad:

- 60% real personal consumption
- 90% of non-agricultural jobs
- Hard hit folks:
  - Low wage workers in IT (telemarketers, phone operators, comp operators)
    - 33% of jobs disappeared 1999-2004
    - Avg wage was only $25,000
- (Wait, were some of these lost to technology??)
The Good

- Export of services = 2*(exports of goods)
- Import of services = 1.5*(import of goods)
  
  and is a very small portion of GDP (.4% in 2003)

  - We have a trade surplus in services (growing every yr)
  - High Growth in service despite overall slow growth

  => we have a service comparative advantage
     - Mann

- High skilled, judgment oriented, problem solving jobs
  
  # jobs Increased 17% 1999-2004

- Amiti and Wei (2005)
  
  Find no evidence that suggests that offshoring fostered job loss in Britain during the period 1995 to 2001
Long Run Consequences

• Argument 1:
  – Just as agriculture and manufacturing did not disappear from our economy, neither will services. The economy will gradually adjust.
  – Projected job loss: portion of labor force that is offshorable
    10% Bardahn an Kroll
    20% Van Welsum, Rief, and Vickory
    3.3 million Forrester Research, McCarthy

1 million is less than avg 2 weeks worth of gross job loss
(Welsum uses the 4 previously mentioned characteristics and tries to count up all the jobs, probably an overestimate for offshoring alone.)

The Offshoring hype is overdone, we should just relax!

• Argument 2:
  – This transformation is fundamentally different from those in the past and will require a very painful adjustment.
So should we all just relax and do nothing?? Not quite...

- Outcomes very unpredictable (graph)
- Policy direction is up for debate
- Policy aimed at helping those who are severely affected would be most helpful
  
  (Main problem is the same: trade induced job loss. The difference is that richer, more influential people are losing their jobs and making noise about it. Perhaps this will help both classes of displaced workers).

- Options:
  - Short Run
    - Job Training
    - Wage Insurance
  - Long Run
    - Education in Science and Engineering
    - Service training education
• **Job Training**
  – Remains fragmented and disorganized
  – Benefits mildly outweigh costs

• **Wage Insurance (Kletzer proposed model)**
  – Up to 2 yrs financial assistance to those that have been laid off through no fault of their own and have lower paying new jobs
  – Assistance = 30 to 70% of earnings loss
  – Benefits not exceed annual cap for each worker
  – Not that costly! $2.9 – 3.8 billion/yr
A discussion of job loss or American competitiveness?

- Initially frightening facts:
  - China has greatly increased university attendance
    - 2005 bachelors grads = 4 million
    - 2010 will graduate more PhDs in science and engineering than US
  - Many other countries doubling university attendance in 90s
  - Folks argue that US needs to:
    - Keep attracting higher educated students to US
    - Encourage US citizens into science and engineering
    - Support the less skilled

- Don't confound two different debates:
  1. Do we want to maintain a growth rate requisite with that of the past? (save this one for another day)
  2. If you build it, they will come

Keep America at the technological forefront to create new jobs.
Gearing Education in the right direction

- Two perspectives, each currently w/ little substantive support or conclusive research:
  1. Learning to learn is more important than learning any particular set of skills
     - Unclear right now what jobs will be available to Americans 15 yrs down the road
     - Information manipulation may become plentiful (and therefore cheap) someday, so why invest so much in it?
  2. Increasing Sci, Eng, and IT education will be beneficial to workers later on
     - Other countries catching up, we need to stay on top

One perspective is vague, the other is far from full-proof
Policy Mishaps

- Policy aimed at sectors misses the losers entirely!
  - Trying to give a boost to a ‘sunrise sector’ won’t help all workers in that sector
    - b/c some workers in that sector are unneeded w/ advent of IT and will be offshored regardless of how the sector is performing
  - Losers are at task level, not firm level
  - Can’t predict who they will be
- So don’t just make a general “globalization-adjustment assistance “ list and aid those industries
- Rather, help workers in general retraining programs
- Focus assistance on individual workers, not sectors
Down with Technology! ?

- Bring us back to the friendly restaurant waiter and taxi driver:
  - Won’t be offshored, will they be replaced?

- Gartner expects that by 2015 automation will displace six times as many IT jobs as offshoring.

Consequences:
1. Far more job displacements
   - A serious problem?
Conclusions

• **Important for this transition to happen as smoothly as possible**
  – Because gains from trade are tremendous, but this transition will be painful and people will be complaining

• **Offshoring is no longer a firm level issue, it affects individual jobs/tasks**

• **Policy needs to help those hurt the most**
  – Help labor, not capital
  – Help displaced workers who also have lower paying new jobs

• **Ensure that prices are mkt determined**
  – Wages paid by employers should reflect productivity levels
    (or else you get East West Germany problem)

• **Don’t stop trade!**
Further Readings

- Freeman, *Shortages, Surpluses, or Fish Stories?*
- Chamarbagwala, *Economic Liberalization & Wage Inequality in India*
- NY Times, *The Nation: Retraining for what?; If you’re a waiter, the future is rosy*
- Daniel Aaronson and Kenneth Housinger, *The impact of technology on displacement and reemployment*
- Kletzer 2006, *Wage Insurance*
- Wasmer and Weizsacker, *A Better Globalization Fund, a Bruegal Policy Brief*
Thanks!