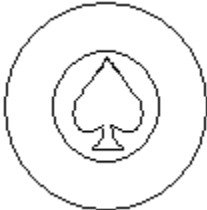
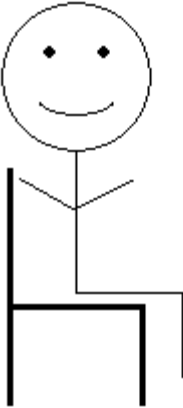


Minimum Wage

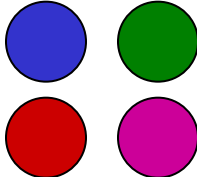
Hempfield High School
September 14, 2012

COMPANIES

Manager



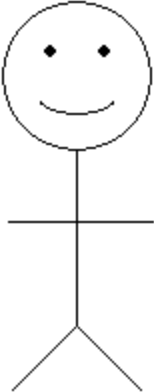
This is \$1.



Each of these is \$5.

WORKERS

Worker

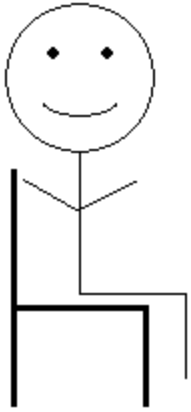


Each of these is 1 hour of labor.

COMPANIES

WORKERS

Manager



Worker



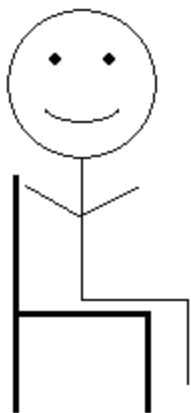
The Manger's job is to decide whether or not to hire labor.

The Manager wants to make as much profit for his company as he can.

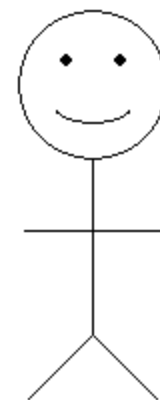
COMPANIES

WORKERS

Manager

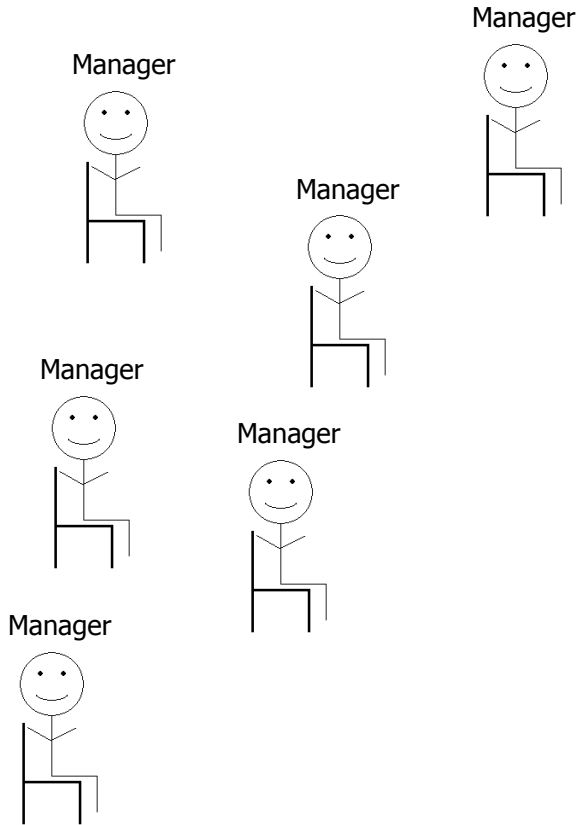


Worker

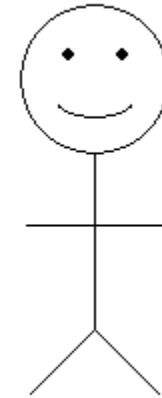


The Worker's job is to sell all of his labor for the highest price he can get.

I'm a Worker. What am I supposed to do?



Worker

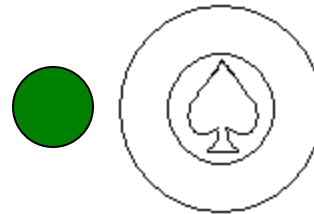
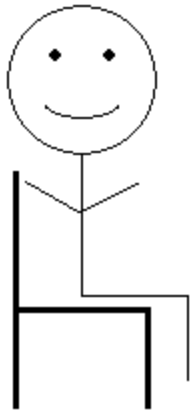


Go to the various managers and see who is willing to pay you the most for your labor.

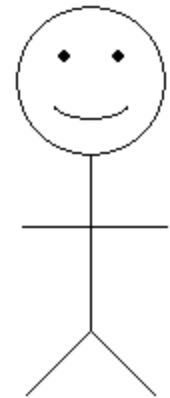
Sell only one chip at a time.

I'm a Worker. What am I supposed to do?

Manager



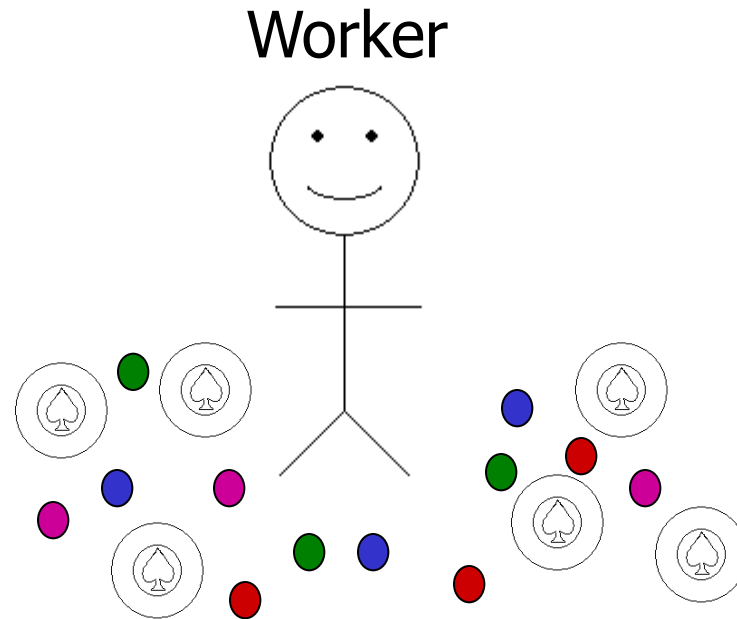
Worker



When you find an acceptable price for your labor, sell your labor to the Manager.

You give him an "hour" of labor. He pays you.

I'm a Worker. What am I supposed to do?

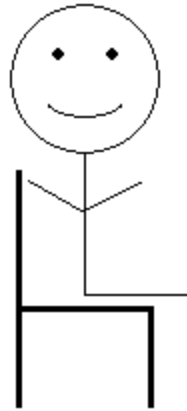


Remember

- Try and get the highest price you can for your labor.
- Try to sell all of your labor (one chip at a time). Left over labor is worthless.

I'm a Manager. What am I supposed to do?

Manager



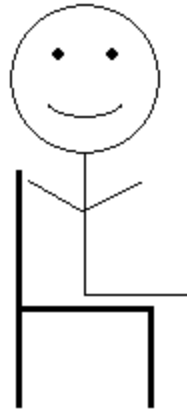
The Manager has to decide how much labor to buy and what price to pay.

The Manager tries to make the most profit he can for the company.

I'm a Manager. What am I supposed to do?

How much
output do I
produce?

Manager



$$\text{Profit} = \text{Revenue} - \text{Cost}$$

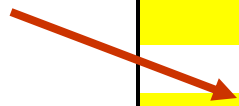
Money you earn from selling your product:
You automatically earn \$2 for every unit of
output you produce.

What it costs to
hire your labor

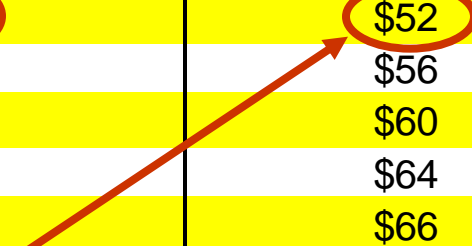
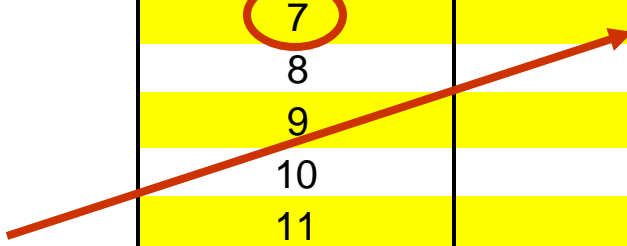
I'm a Manager. What am I supposed to do?

Units of Labor You Currently Have	Units of Output Produced by the Labor You Currently Have	Total Revenue from the Sale of Your Output
0	0	\$0
1	10	\$20
2	14	\$28
3	17	\$34
4	20	\$40
5	22	\$44
6	24	\$48
7	26	\$52
8	28	\$56
9	30	\$60
10	32	\$64
11	33	\$66
17	41	\$82
18	42	\$84
19	44	\$88

If you hire 7 hours of labor...



...you will produce 26 units of output.



Your output is automatically sold for \$2 each.

Producing 26 units of output gives you revenue of

$$26 \times \$2 = \$52$$

I'm a Manager. What am I supposed to do?

Example

You start off with no labor.

Suppose you can hire labor for **\$7** per hour.

Should you hire an hour of labor?

Units of Labor You Currently Have	Units of Output Produced by the Labor You Currently Have	Total Revenue from the Sale of Your Output
0	0	\$0
1	10	\$20
2	14	\$28
3	17	\$34
4	20	\$40
5	22	\$44
6	24	\$48
7	26	\$52
8	28	\$56
9	30	\$60
10	32	\$64
11	33	\$66
12	35	\$70
13	36	\$72
14	37	\$74
15	39	\$78
16	40	\$80
17	41	\$82
18	42	\$84
19	44	\$88
20	45	\$90

I'm a Manager. What am I supposed to do?

Example

You start off with no labor.

Suppose you can hire labor for **\$7** per hour.

Should you hire an hour of labor?

Revenue: Rises by \$20

Cost: Rises by \$7

Profit: Rises by \$13. **Yes, hire!**

Units of Labor You Currently Have	Units of Output Produced by the Labor You Currently Have	Total Revenue from the Sale of Your Output
0	0	\$0
1	10	\$20
2	14	\$28
3	17	\$34
4	20	\$40
5	22	\$44
6	24	\$48
7	26	\$52
8	28	\$56
9	30	\$60
10	32	\$64
11	33	\$66
12	35	\$70
13	36	\$72
14	37	\$74
15	39	\$78
16	40	\$80
17	41	\$82
18	42	\$84
19	44	\$88
20	45	\$90

I'm a Manager. What am I supposed to do?

Example

You currently have 1 hour of labor.

Suppose you can hire labor for **\$7** per hour.

Should you hire a 2nd hour of labor?

Units of Labor You Currently Have	Units of Output Produced by the Labor You Currently Have	Total Revenue from the Sale of Your Output
0	0	\$0
1	10	\$20
2	14	\$28
3	17	\$34
4	20	\$40
5	22	\$44
6	24	\$48
7	26	\$52
8	28	\$56
9	30	\$60
10	32	\$64
11	33	\$66
12	35	\$70
13	36	\$72
14	37	\$74
15	39	\$78
16	40	\$80
17	41	\$82
18	42	\$84
19	44	\$88
20	45	\$90

I'm a Manager. What am I supposed to do?

Example

You currently have 1 hour of labor.

Suppose you can hire labor for **\$7** per hour.

Should you hire a 2nd hour of labor?

Revenue: Rises by \$8

Cost: Rises by \$7

Profit: Rises by \$1. **Yes, hire!**

Units of Labor You Currently Have	Units of Output Produced by the Labor You Currently Have	Total Revenue from the Sale of Your Output
0	0	\$0
1	10	\$20
2	14	\$28
3	17	\$34
4	20	\$40
5	22	\$44
6	24	\$48
7	26	\$52
8	28	\$56
9	30	\$60
10	32	\$64
11	33	\$66
12	35	\$70
13	36	\$72
14	37	\$74
15	39	\$78
16	40	\$80
17	41	\$82
18	42	\$84
19	44	\$88
20	45	\$90

I'm a Manager. What am I supposed to do?

Example

You currently have 2 hours of labor.

Suppose you can hire labor for **\$7** per hour.

Should you hire a 3rd hour of labor?

Units of Labor You Currently Have	Units of Output Produced by the Labor You Currently Have	Total Revenue from the Sale of Your Output
0	0	\$0
1	10	\$20
2	14	\$28
3	17	\$34
4	20	\$40
5	22	\$44
6	24	\$48
7	26	\$52
8	28	\$56
9	30	\$60
10	32	\$64
11	33	\$66
12	35	\$70
13	36	\$72
14	37	\$74
15	39	\$78
16	40	\$80
17	41	\$82
18	42	\$84
19	44	\$88
20	45	\$90

I'm a Manager. What am I supposed to do?

Example

You currently have 2 hours of labor.

Suppose you can hire another labor for **\$7** per hour.

Should you hire a 3rd hour of labor?

Revenue: Rises by \$6

Cost: Rises by \$7

Profit: Falls by \$1. **No!**

Units of Labor You Currently Have	Units of Output Produced by the Labor You Currently Have	Total Revenue from the Sale of Your Output
0	0	\$0
1	10	\$20
2	14	\$28
3	17	\$34
4	20	\$40
5	22	\$44
6	24	\$48
7	26	\$52
8	28	\$56
9	30	\$60
10	32	\$64
11	33	\$66
12	35	\$70
13	36	\$72
14	37	\$74
15	39	\$78
16	40	\$80
17	41	\$82
18	42	\$84
19	44	\$88
20	45	\$90

I'm a Manager. What am I supposed to do?

Example

You currently have 2 hours of labor.

Suppose you convince a worker to accept **\$5** per hour.

Should you hire a 3rd hour of labor?

Units of Labor You Currently Have	Units of Output Produced by the Labor You Currently Have	Total Revenue from the Sale of Your Output
0	0	\$0
1	10	\$20
2	14	\$28
3	17	\$34
4	20	\$40
5	22	\$44
6	24	\$48
7	26	\$52
8	28	\$56
9	30	\$60
10	32	\$64
11	33	\$66
12	35	\$70
13	36	\$72
14	37	\$74
15	39	\$78
16	40	\$80
17	41	\$82
18	42	\$84
19	44	\$88
20	45	\$90

I'm a Manager. What am I supposed to do?

Example

You currently have 2 hours of labor.

Suppose you convince a worker to accept **\$5** per hour.

Should you hire a 3rd hour of labor?

Revenue: Rises by \$6

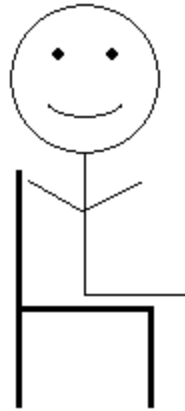
Cost: Rises by \$5

Profit: Rises by \$1. **Yes, hire!**

Units of Labor You Currently Have	Units of Output Produced by the Labor You Currently Have	Total Revenue from the Sale of Your Output
0	0	\$0
1	10	\$20
2	14	\$28
3	17	\$34
4	20	\$40
5	22	\$44
6	24	\$48
7	26	\$52
8	28	\$56
9	30	\$60
10	32	\$64
11	33	\$66
12	35	\$70
13	36	\$72
14	37	\$74
15	39	\$78
16	40	\$80
17	41	\$82
18	42	\$84
19	44	\$88
20	45	\$90

I'm a Manager. What am I supposed to do?

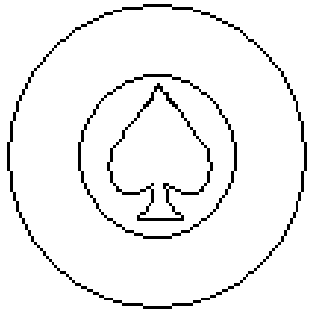
Manager



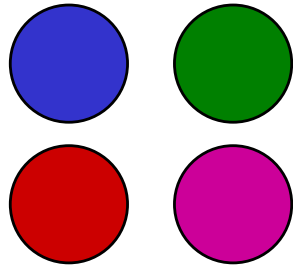
Units of Labor You Currently Have	Units of Output Produced by the Labor You Currently Have	Total Revenue from the Sale of Your Output
0	0	\$0
1	10	\$20
2	14	\$28
3	17	\$34
4	20	\$40
5	22	\$44
6	24	\$48
7	26	\$52
8	28	\$56
9	30	\$60
10	32	\$64
11	33	\$66
12	35	\$70
13	36	\$72
14	37	\$74
15	38	\$78
16	40	\$80
17	41	\$82
18	42	\$84
19	44	\$88
20	45	\$90
21	46	\$92
22	47	\$94
23	48	\$96
24	49	\$98
25	50	\$100
26	51	\$102
27	52	\$104
28	53	\$106
29	54	\$108
30	55	\$110
31	56	\$112
32	57	\$114
33	57	\$114
34	58	\$116
35	59	\$118
36	60	\$120
37	61	\$122
38	62	\$124
39	62	\$124
40	63	\$126

Remember

- Keep track of how much labor you currently have.
- Monitor the wages your competitors are offering.
- Only hire labor if doing so increases your profit.



This is \$1.



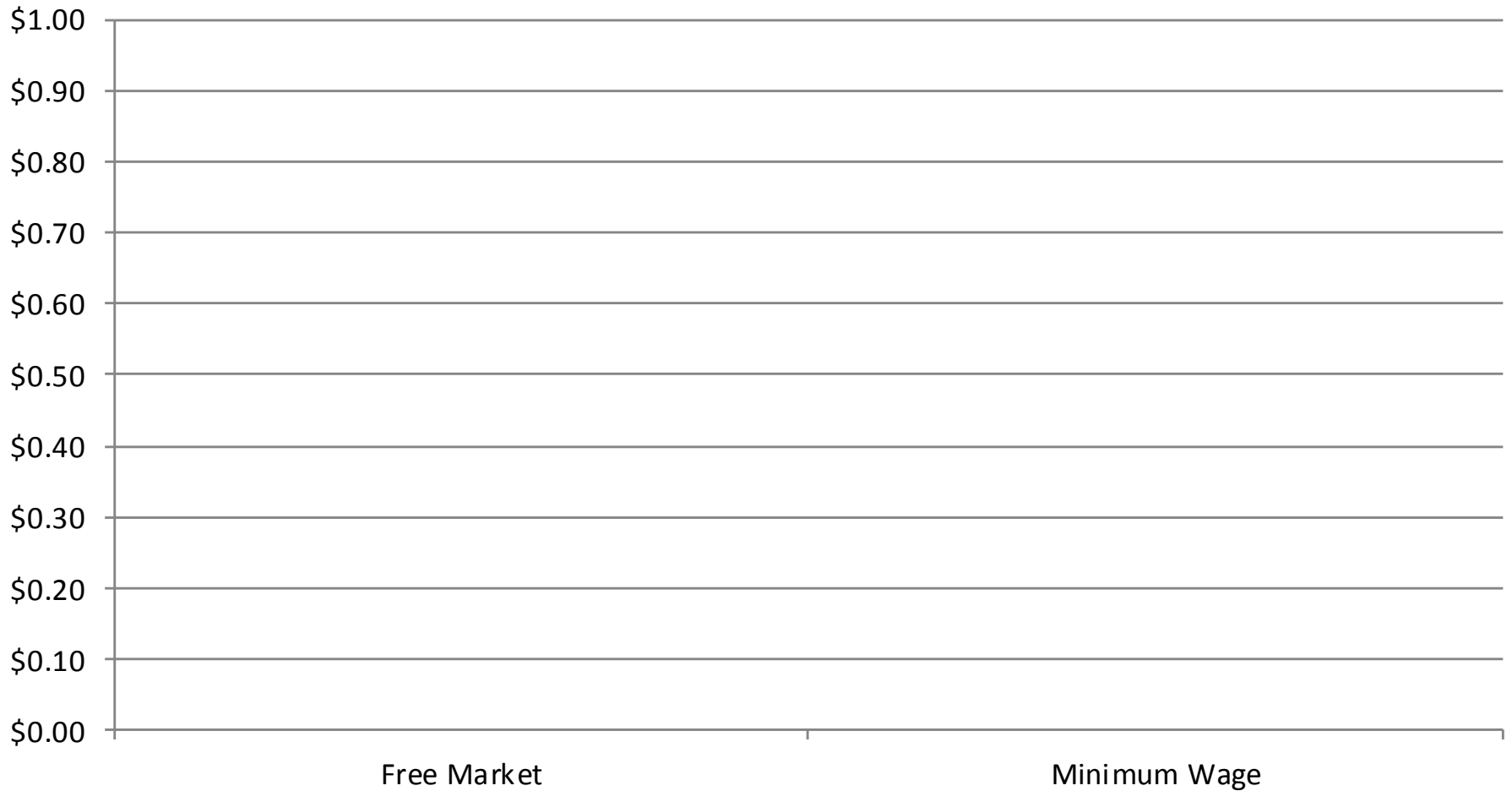
Each of
these is \$5.



Each of these is
1 hour of labor.

What effect do you believe the minimum wage has on the average wage rate?

Wage Rate



What effect do you believe the minimum wage has on workers' incomes?

Total Income

\$1
\$1
\$1
\$1
\$1
\$1
\$0
\$0
\$0
\$0
\$0

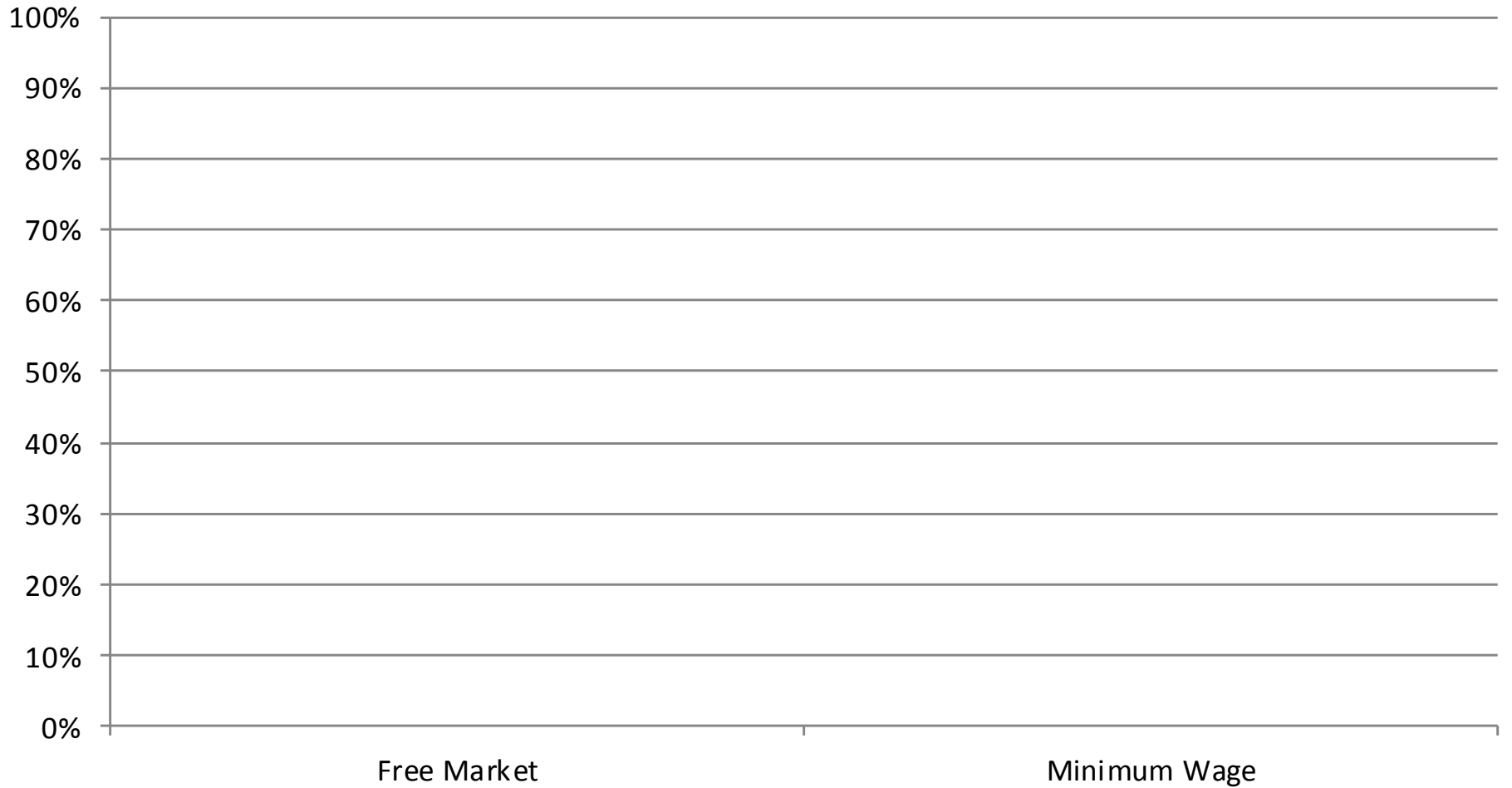
Free Market

Minimum Wage



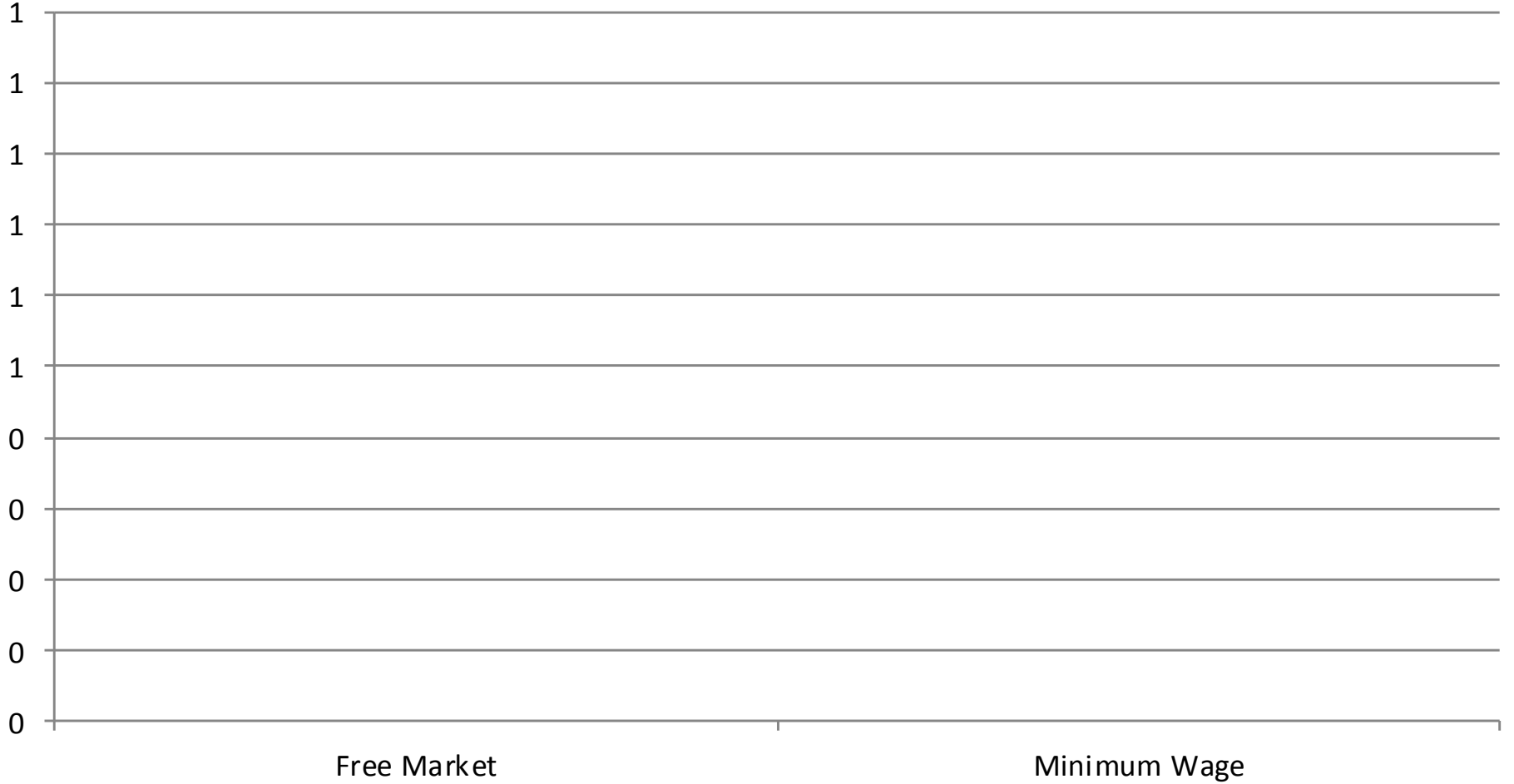
What effect do you believe the minimum wage has on the unemployment rate?

Unemployment Rate



What effect do you believe the minimum wage has on production (GDP)?

Production



What effect do you believe the minimum wage has on firms' profits?

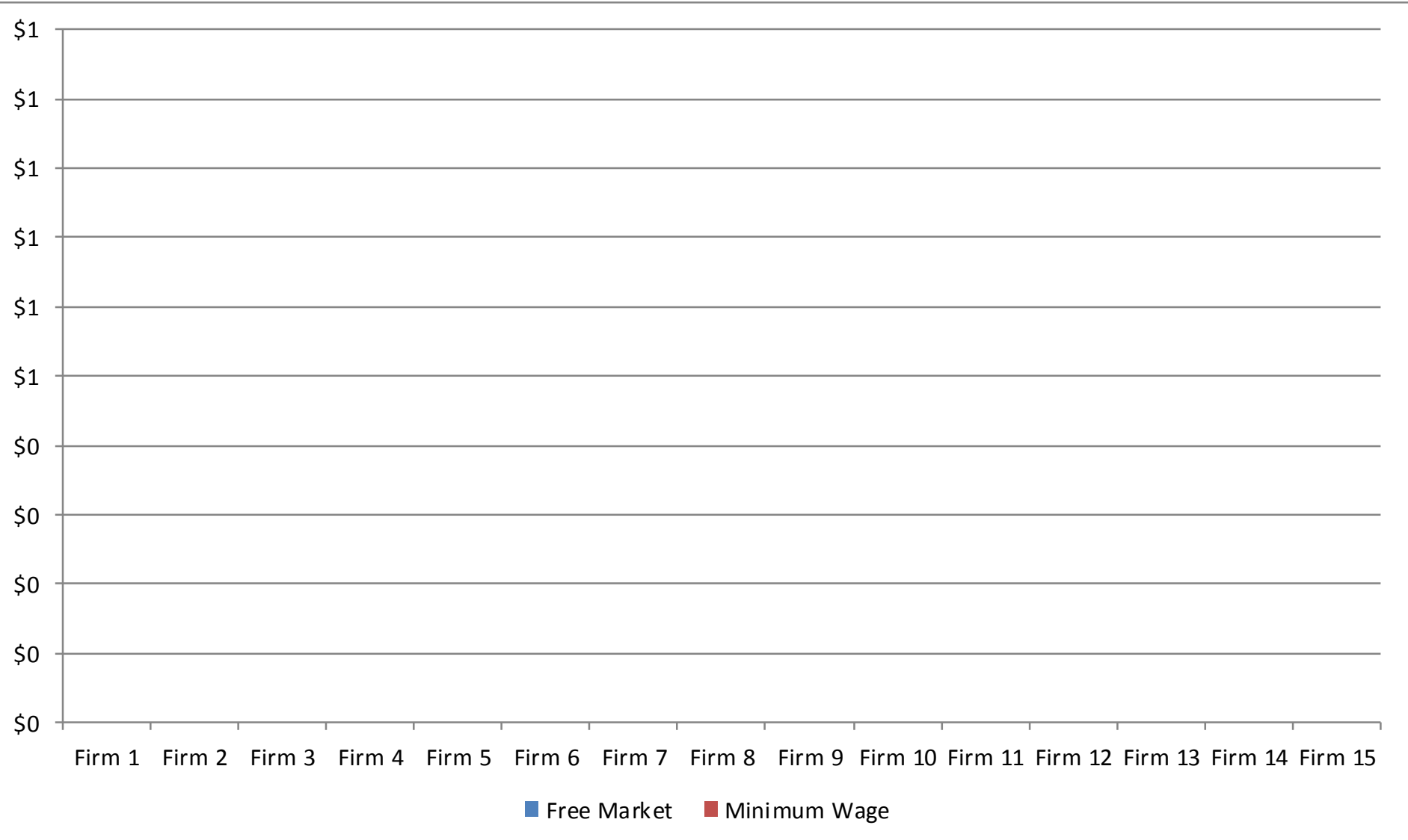
Profit

\$1
\$1
\$1
\$1
\$1
\$1
\$0
\$0
\$0
\$0
\$0

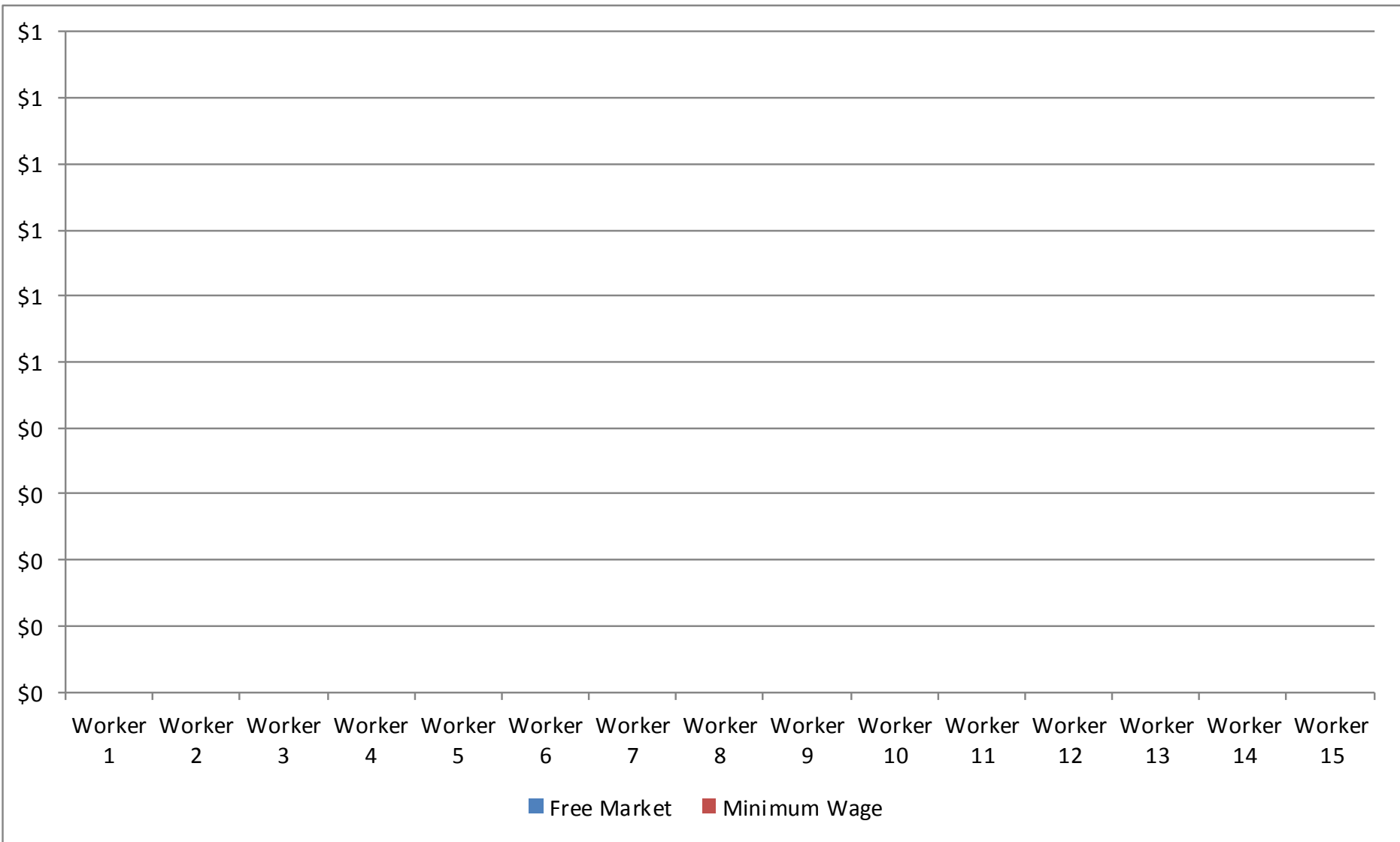
Free Market

Minimum Wage



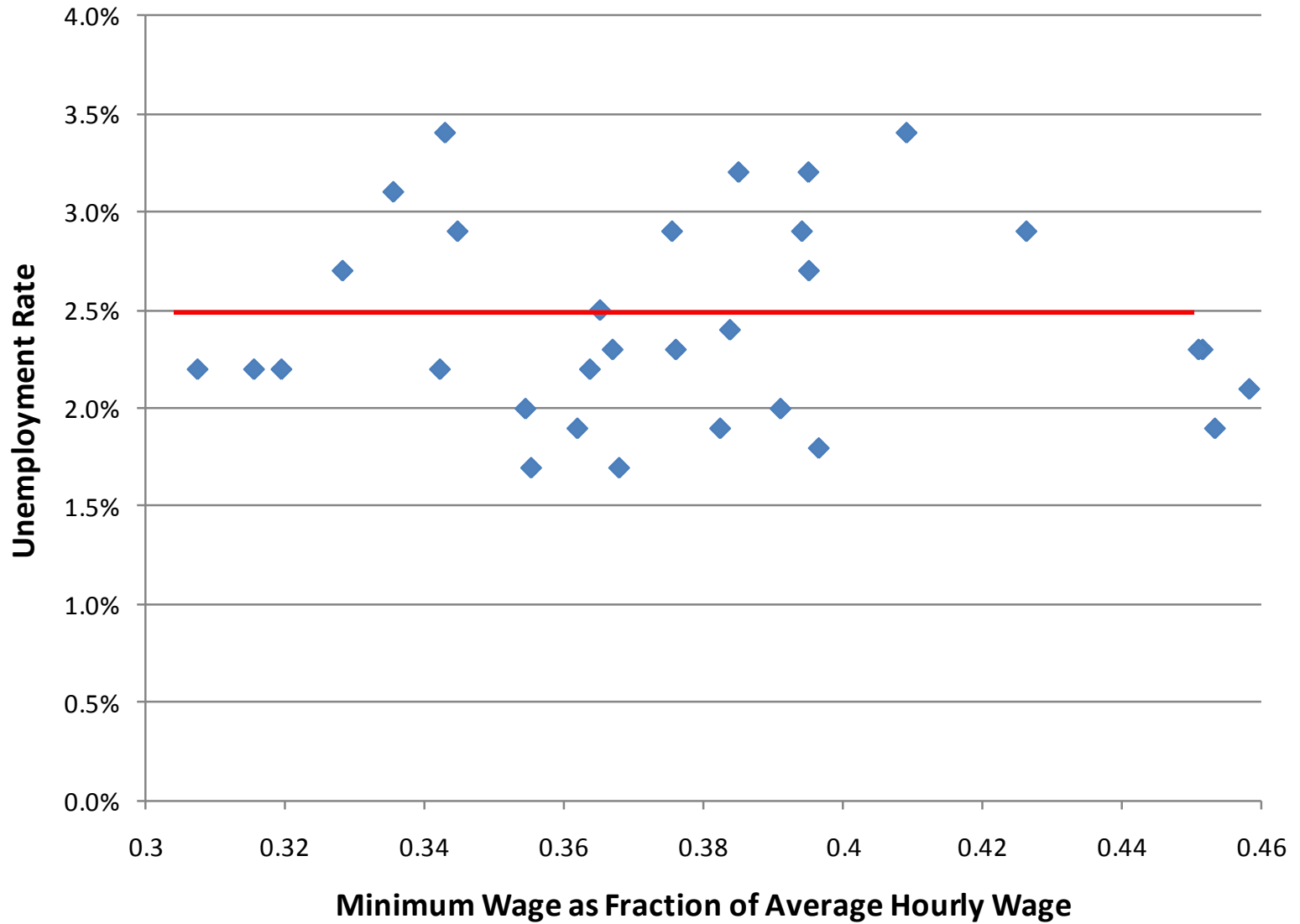


Does the minimum wage help anybody?



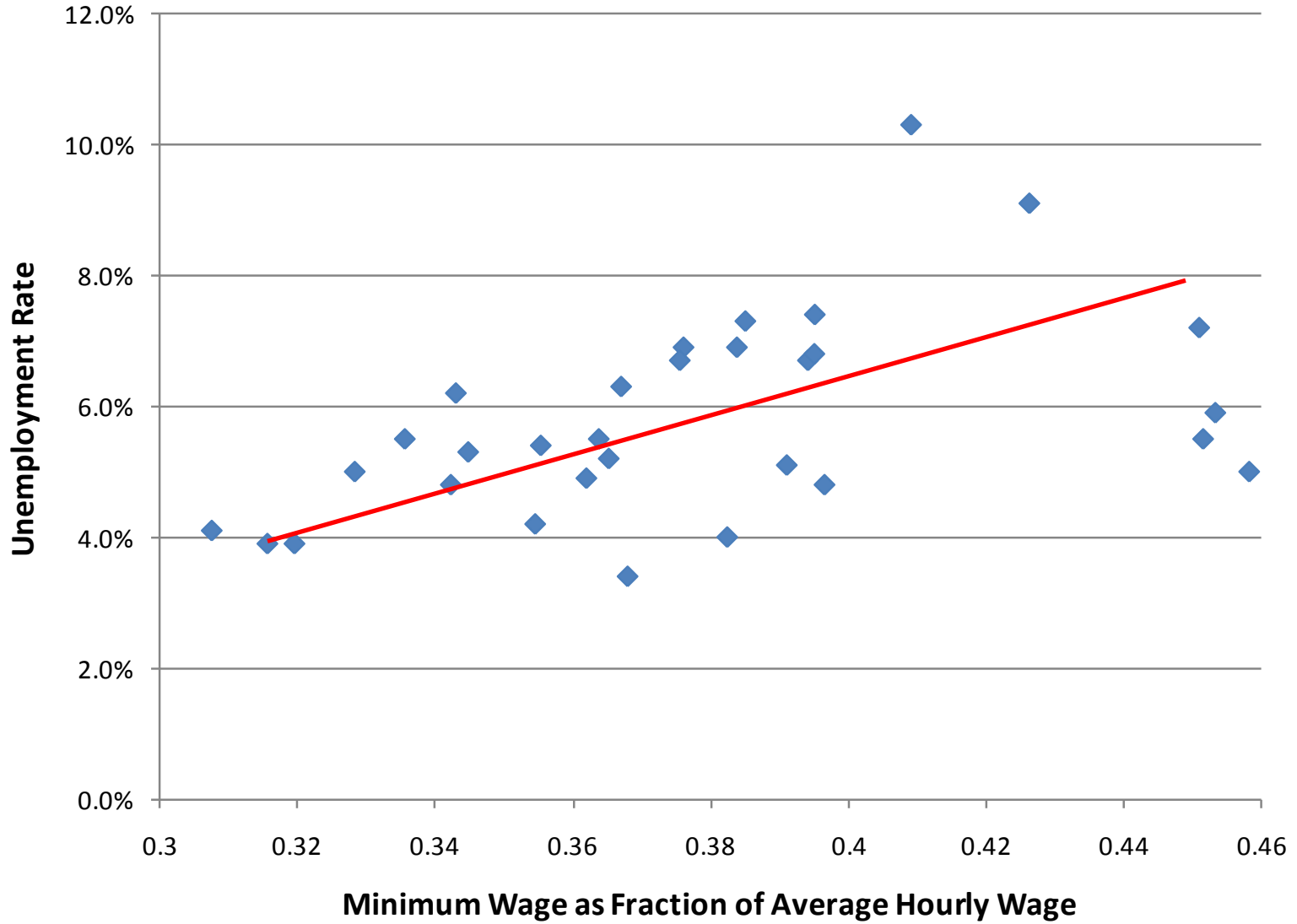
Does it work this way in the real world?

College Education (1978-2008)



Data sources: [Statistical Abstract of the United States](#) and [Bureau of Labor Statistics](#)

HS Education (1978-2008)



Data sources: [Statistical Abstract of the United States](#) and [Bureau of Labor Statistics](#)

Less than HS Education (1978-2008)

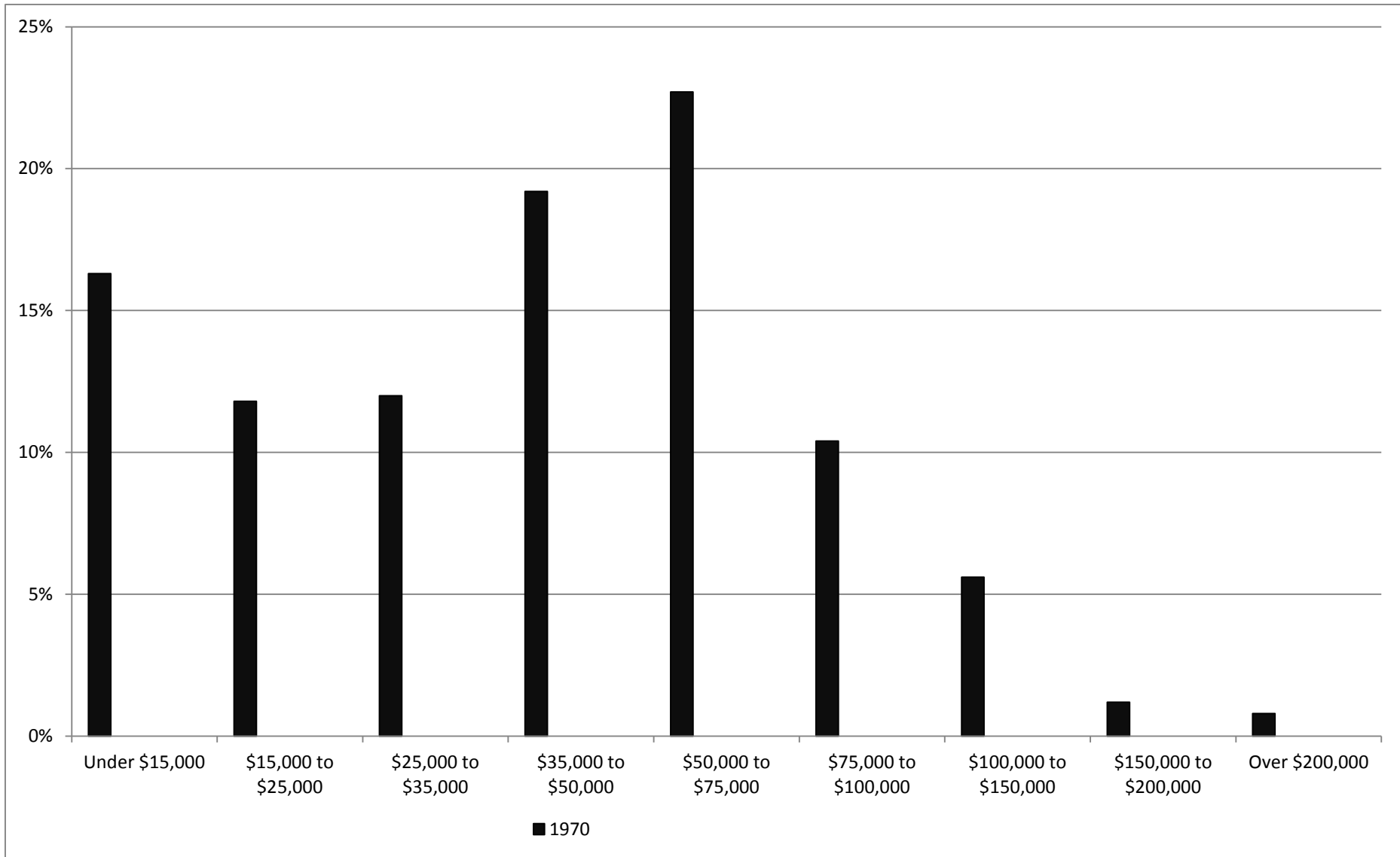


Data sources: [Statistical Abstract of the United States](#) and [Bureau of Labor Statistics](#)

But, we have to do something! The rich are getting richer while the poor get poorer!

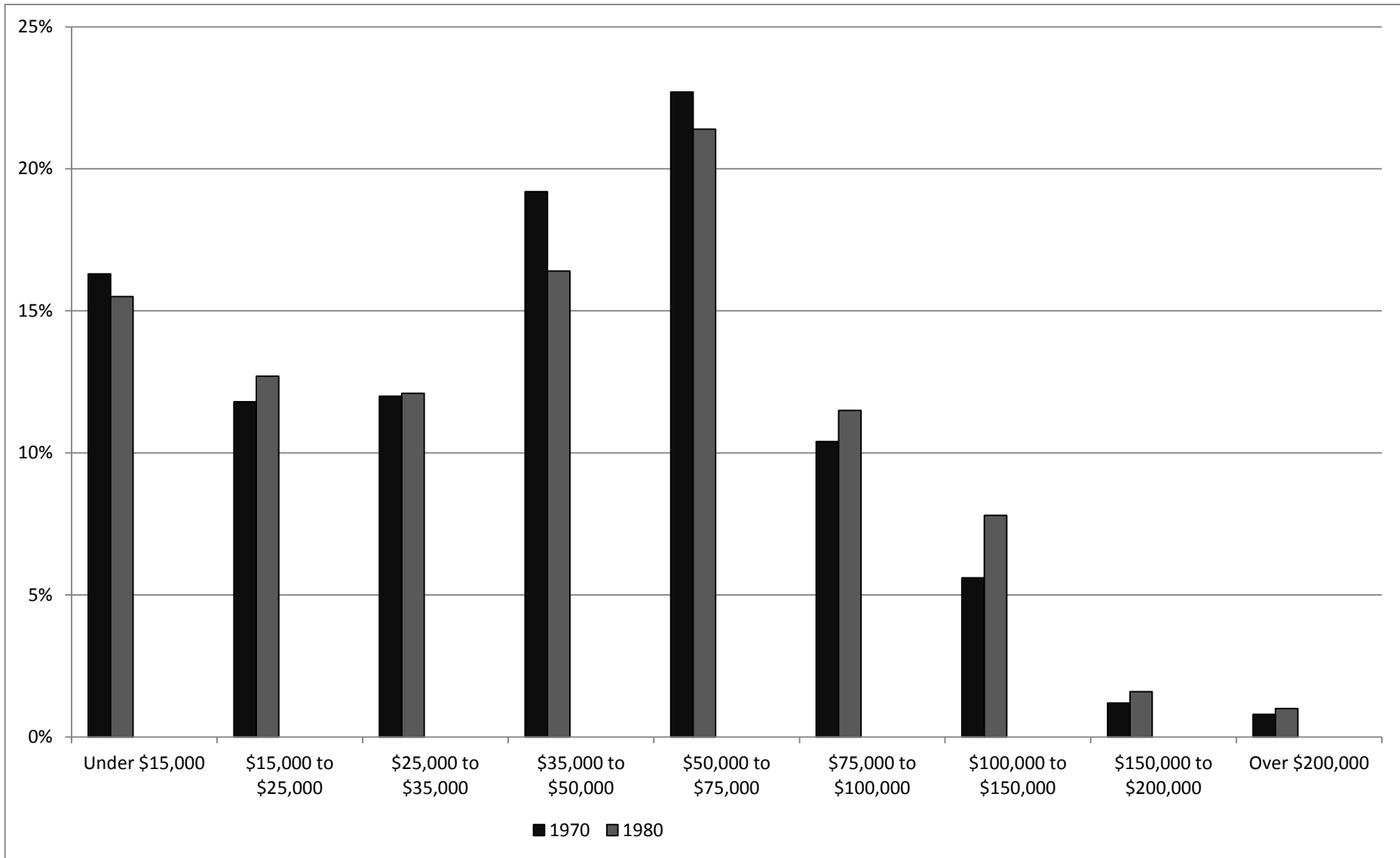


Distribution of Household Incomes (2009\$)



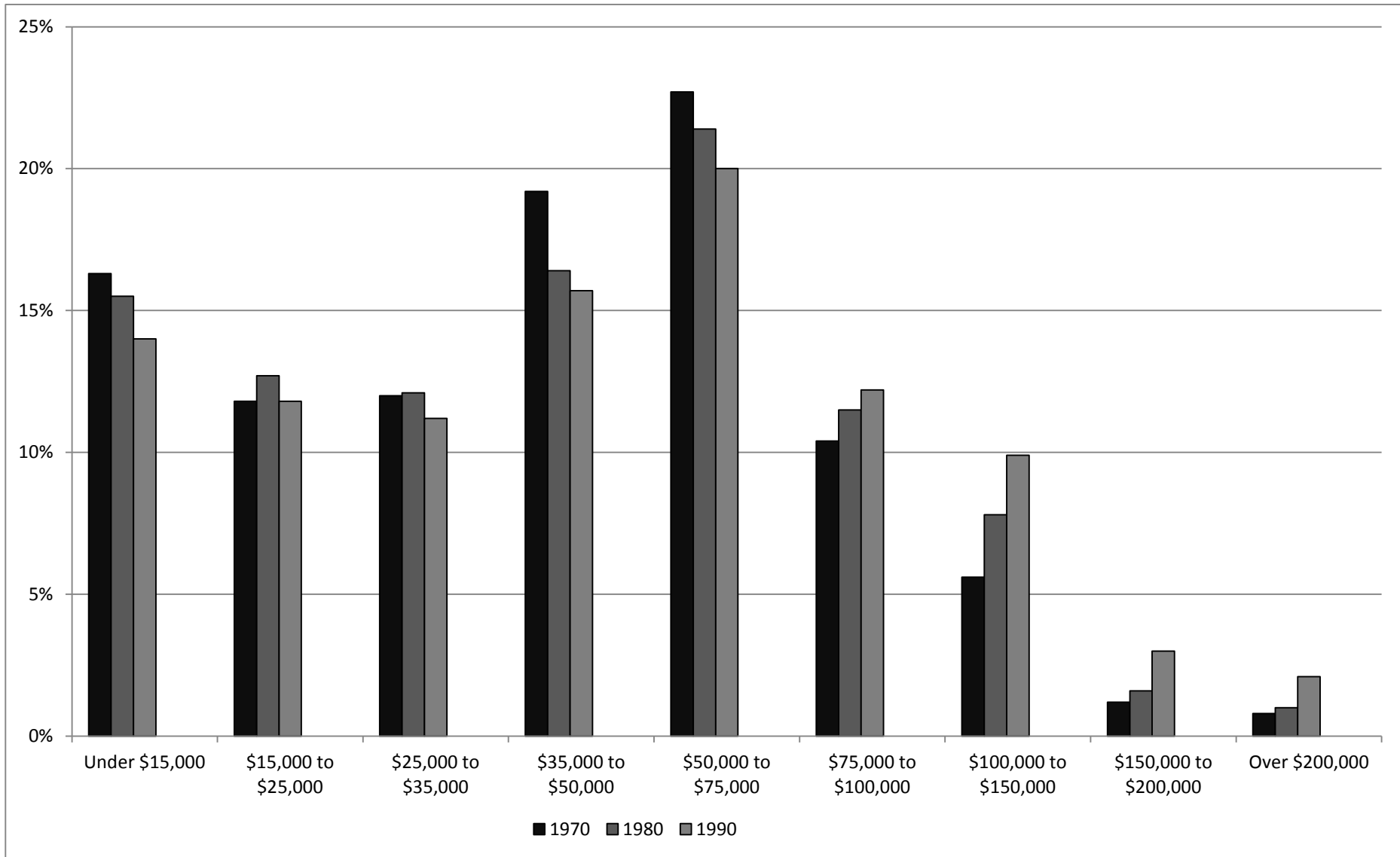
Data source: Income, Poverty, and Health Insurance Coverage in the United States: 2010, Bureau of the Census..

Distribution of Household Incomes (2009\$)



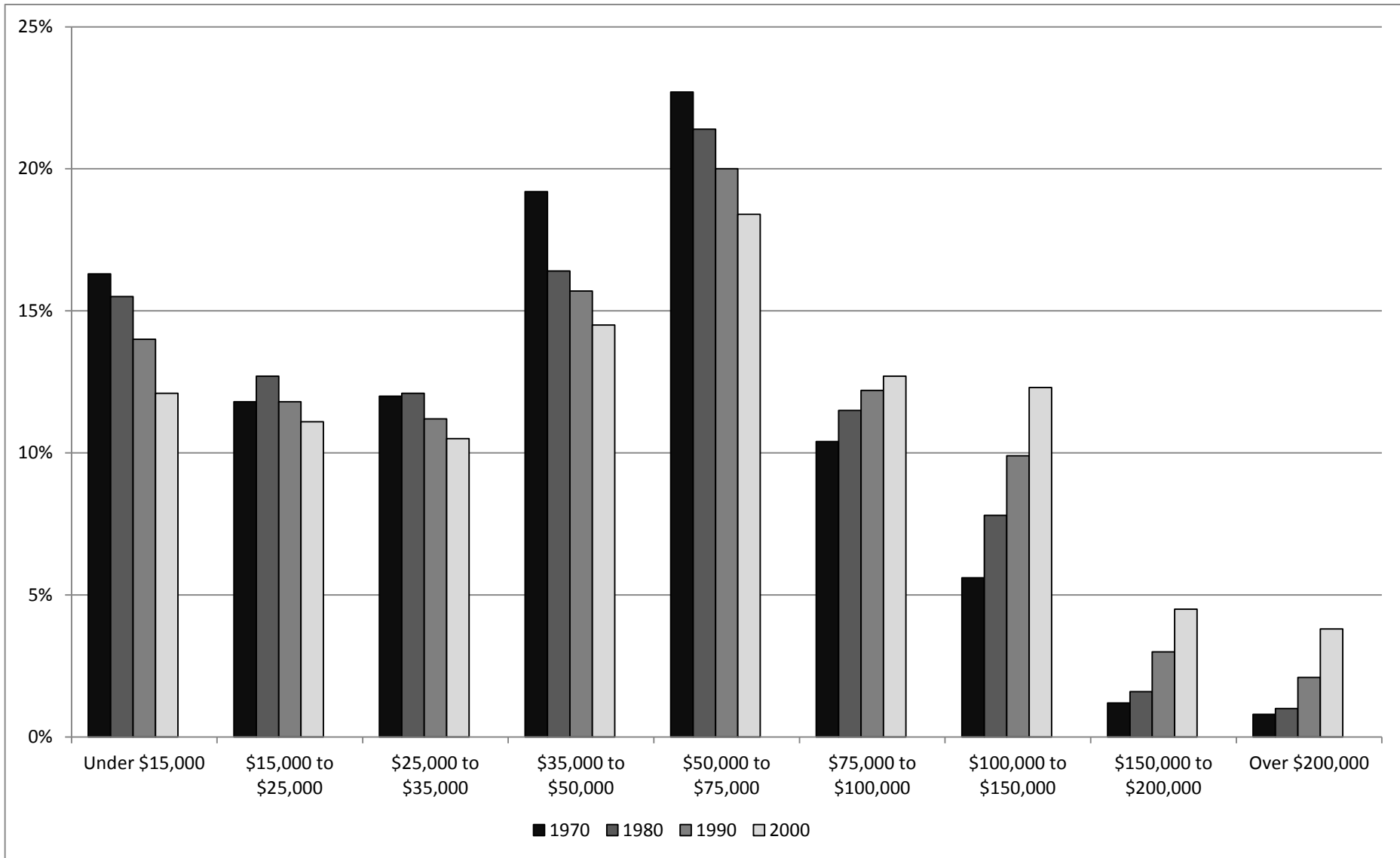
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Distribution of Household Incomes (2009\$)



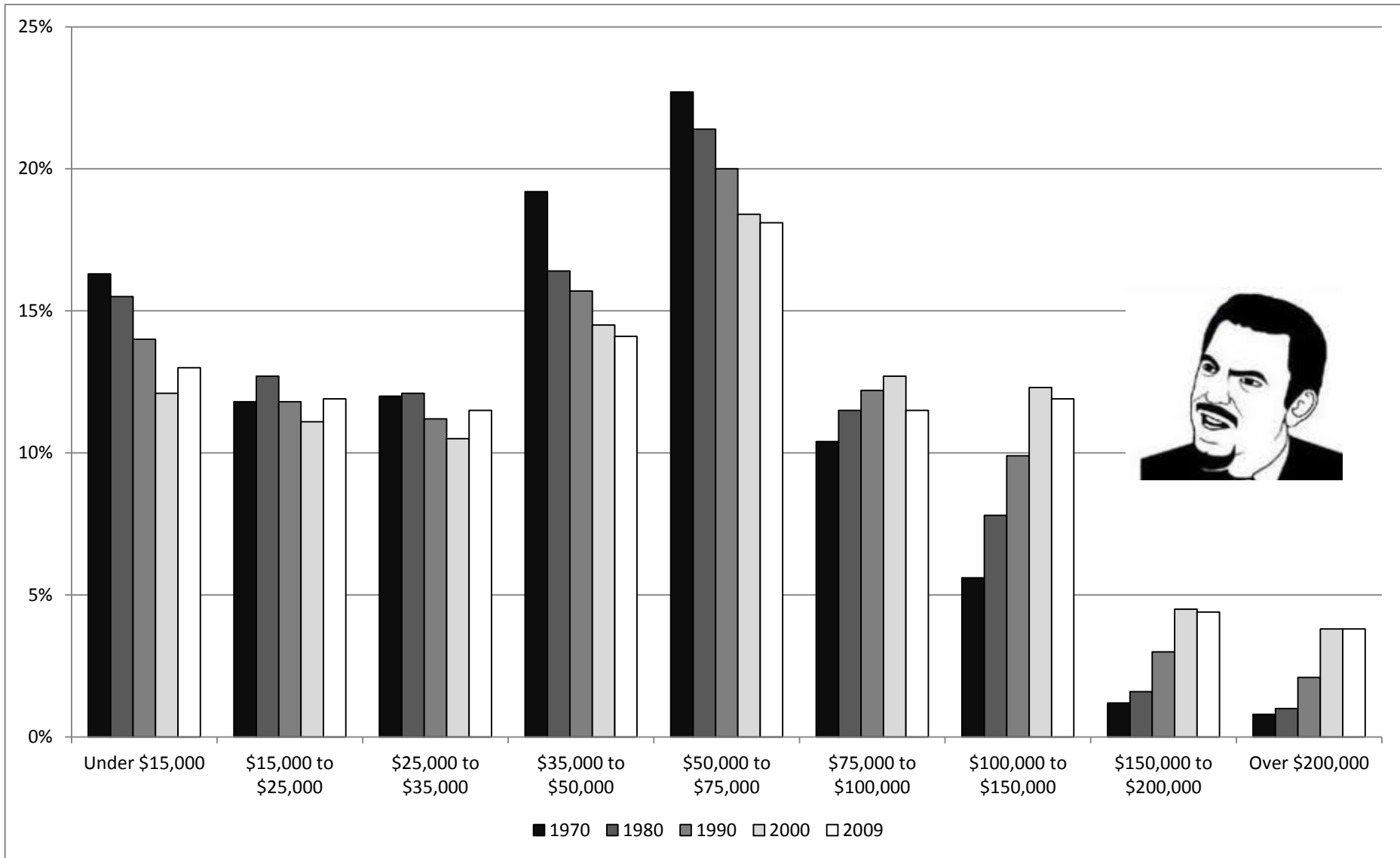
Data source: Income, Poverty, and Health Insurance Coverage in the United States: 2010, Bureau of the Census..

Distribution of Household Incomes (2009\$)



Data source: Income, Poverty, and Health Insurance Coverage in the United States: 2010, Bureau of the Census..

Distribution of Household Incomes (2009\$)



Data source: Income, Poverty, and Health Insurance Coverage in the United States: 2010, Bureau of the Census..

The Rich Get Richer and the Poor Get Poorer

In 2000, the poorest Americans earned 3.8% of all income.
In 2007, the poorest Americans earned 3.4% of all income.

In 2000, the richest Americans earned 47% of all income.
In 2007, the richest Americans earned 50% of all income.

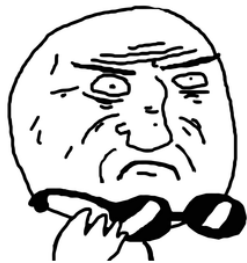
The rich get richer and
the poor get poorer.



The Old Get Older and the Young Get Younger

In 2000, the oldest Americans were 65.7 years old.
In 2010, the oldest Americans earned 66.8 years old.

In 2000, the youngest Americans were 7.1 years old.
In 2010, the youngest Americans earned 6.9 years old.



But, the rich don't pay their fair share of taxes!

Congressional Budget Office, 2009

All Federal Taxes

- The richest 1% paid an average tax rate of 29%.
- Middle-income Americans paid an average tax rate of 11%.
- The poorest 20% of Americans paid an average tax rate of 1%.

Congressional Budget Office, 2009

All Federal Taxes

Richest 1% of Americans

Average income: \$1.2 million

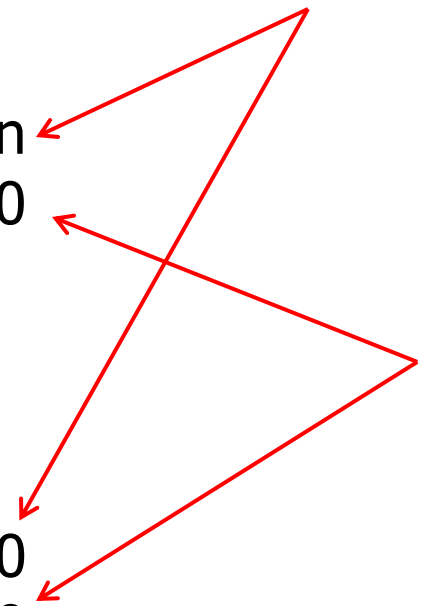
Average taxes paid: \$353,000

Middle-income Americans

Average income: \$64,000

Average taxes paid: \$7,000

Top 1% earns 20 times
what middle-class earns.



Top 1% pays 50 times
what middle-class pays.

The real economic problem involves the “not yet” rich.



Lessons

1. The minimum wage helps workers who keep their jobs at the expense of workers who don't.
2. The top 1% earn 20 times more than average Americans but pay 50 times the taxes.
3. The cautionary tale in taxing the rich is to beware of how you affect the not-yet-rich.

Minimum Wage

Hempfield High School
September 14, 2012