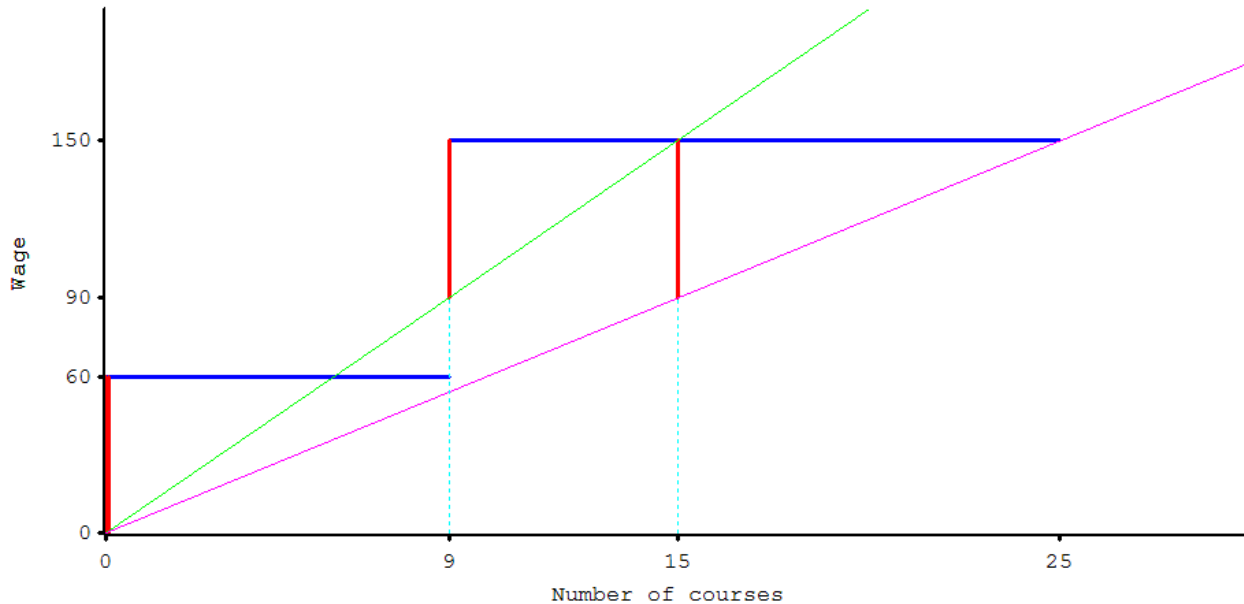


Spence's signaling model



The above graph illustrates Spence's argument in "Job Market Signalling."

There are assumed to be two types of workers: the "able" and the "less able".

Assume that workers identified as "able" are paid \$ 150,000 a year and those identified as "less able" are paid less -- \$ 60,000 a year. The blue lines show these levels (for simplicity, the last three zeros are dropped). Note that the pay is fixed regardless of how many courses someone has taken, and the blue lines could have been drawn horizontally across the entire graph. They have been restricted for clarity.

The way to get yourself identified as "able" is to take a number of demanding courses.
If the "less able" pay a higher psychic cost for taking demanding courses, they will take fewer of them.

The costs paid by "less able" workers are indicated by the green line starting at the origin.
The equation of the line is $C = 10 N$, where C is total cost and N is the number of courses.
The costs paid by "able" workers are indicated by the magenta line starting at the origin.
The equation of the line for "able" workers is $C = 6 N$ (shorthand for $C = 6,000 N$).

Workers (whether "able" or "less able") will try to maximize their NET INCOME = income - costs.
The RED LINES show this net income, and are key to understanding the graph.
The vertical red line at the origin shows that workers with zero demanding courses on their transcripts will be identified as "less able" and will have a net income of \$ 60,000 (they have incurred none of the psychic costs of demanding courses).

If only 9 courses were required to be identified as "able", even the less able workers might take those courses -- they would have a net income of \$ 150,000 - \$ 90,000 = \$ 60,000. Certainly it would be in their interest to take 8 courses, with a net income of \$ 150,000 - \$ 80,000 = \$ 70,000

However, "able" workers are willing to take up to 15 courses to be identified as able.
Since their net income is given as $150,000 - 6,000 N$, and they would make \$ 60,000 as their default income, they will take courses until $150,000 - 6,000 N = 60,000$ or $6000 N = 90,000$ or $N = 15$.