There Is No Perfect Social Net

People often advocate various changes in social net without realizing one important thing: the perfect one is impossible.

What I mean by that is that **no matter how** you take the money from some people and give them as help to other, **at least one** of the following problems will arise:

1. The system will not guarantee the minimal standard of living. Someone will be below the poverty line.
2. For some people, working and earning **more** will result in **same or less** overall income. So its better for them **not** to work more.
3. People who do not need any support still have it.

Here is the formal proof.

Let x be one's earned income and $W(x)$ be the state's help to them. Let's choose monetary units such that the minimal standard of living is **1**. Then the previously stated conditions are expressed as following:

1. $x + W(x) >= 1$ for any $x >= 0$ (everybody has at least 1 unit of money per month)

2. $\partial(x + W(x))/\partial x > 0$ for any $x >= 0$ (the more you earn, the more your total income is)

    2.1. If you are not familiar with differential notation, here is another one: for any x_1, x_2 if $(x_1 > x_2)$ then $x_1 + W(x_1) > x_2 + W(x_2)$.

3. $W(x) = 0$ for any $x >= 1$ (zero help to those who don't need it)

What form of $W(x)$ satisfies these conditions? Lets try to find out.

From (1) it follows that $W(0) >= 1$. [Step 1]

From (3) -- that $W(1) = 0$. [Step 2]

From [Step 2] that $1 + W(1) = 1$. [Step 3].

Let's introduce $T(x) = x + W(x)$. [Step 4]

From [Step 1] and [Step 4]: $T(0) >= 1$. [Step 5]

From [Step 2] and [Step 4]: $T(1) = 1$. [Step 6]

From [Step 5] and [Step 6]: **T**(0) >= **T**(1). [Step 7]

However, from (2) it follows that **T**(**x**) is monotonously increasing with **x**, meaning **T**(1) > **T**(0) [5]. [Step 8]

Conditions [Step 7] and [Step 8] are in a direct contradition to each other regardless of the choice of **W**(**x**). [Step 9]

Therefore, no choice of a wealth redistribution system satisfies all three requirements at the same time. Such **W**(**x**) does not exist.

Q.E.D.

In practice that means that no matter how the society is organized, you'll have to accept at least one of the evils:

a) People die on the streets because they have no money for basic needs.

b) Some people don't work or work very minor jobs because more income would result in same or reduced overall income for them, due to reduced state's help.

c) Some people who do not really need help still get it.

In my personal opinion, "c)" is the least evil, though some may disagree.

On a final note, a well-organized system is such where only one of these problems exists. Many screwed up societies may have two or all three of these evils flowering at the same time.

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