

Equity: the unsolved puzzle about outcomes, formal rights and responsibilities.

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Introduction

In a recent editorial of Health Economics, Rosa Dias and Jones, advocate, by means of a threefold argument, the adoption, by equity researchers of the cornerstone concept of equality of opportunity and the related concepts of individual responsibilities (effort) in contrasts to circumstances (not to be imputed to individuals).

Our aim, is to show that the stress on the concept of equality of opportunities, and on the importance of circumstances and effort is to be qualified.

In fact we do take account of two big measurement difficulties of the above approach, namely that effort is hardly measurable, and we need carefully define to which health risk we are applying the equity concept.

The first measurement issue, regarding effort, to our view requires either a profession of faith or an unacceptable simplification. In fact an issue is central for every analysis of *effort*, namely *time*. Could we say that responsibility is a strict function of time: i.e. the more a given unhealthy habit lasts the more the individual is responsible? But as time passes also circumstances are changing: so that if we want to analyze effort we should allow for changing circumstances, while if we want to stick to given circumstances effort is hardly measurable.

The second point can be stated as follows: equity analysis suffers from a lack of clarity about a central point of modern health insurances: which is the risk covered?

Assume that there are at least two big groups of risks, demanding for different insurance coverage:

- Health risks in the childhood and the working age, mainly acute care risks with a fraction of chronic illnesses characterized by low lethality.
- Health risks in old age, calling for long term care and for palliative care before death.

It can be shown that the concepts of equity should be different in the two cases. Take the second case: the long term care cannot be justified neither in terms of preference given to low age (fair innings approach), nor in terms of need from a supply side point of view (productivity of care) as palliative care is by definition unproductive.

We suggest, then, that rather than an equality of opportunity approach, a criteria of pure formal right should be introduced, defining entitlements to a lifetime amount of services, and equity can be ascertained only beyond the scope of formal rights.

The work is organized as follows: in the first part we discuss of circumstances and efforts, in the second on the different health risks and we suggest our view on the topic. Follows the conclusions.

Circumstances and efforts

Assume that you are born in a smokers family and when you were a teen-ager you began to smoke because such was the “correct” behavior to be accepted by the group you lived with at school and in your town. We can say that “circumstances” were responsible for a decision taken when you were not able to fully understand the consequences of your current behavior. You are now in your fifties, and they say that you cannot receive care without an additional financial contribution¹, even if you are poor, because you are “responsible” of your cancer, in that you made no “effort” to give up

¹ The same argument apply if rather than being asked to pay for the treatment your are placed at the bottom of the waiting list giving access to care

smoking. You answer that you made many efforts, costly in terms of money, time and pain, but you did not succeed, while the other citizen with a cancer, non smoker (he happened to live in a non smoker family and he had always social rapports with non smokers), never faced any cost to give up a vice that circumstances never imposed to him, now is not asked to pay for the treatment of cancer. Is then equitable a double payment (effort to give-up, and further payment for treatment) to face past “bad circumstances”?

Let’s add to this example a further complication: a friend of yours, having a cancer, faced the same bad circumstances than you, started to smoke, but when he was in the thirties gave up because of the trauma of the sudden death for breast cancer of his father. He made no effort to give up and now he is not asked to pay an additional contribution because he is only a “former smoker”.

Finally think to a rich, bored individual, that started to smoke late in his life (thirties) only because of boredom (knowing well the consequences of such a behavior), never made any effort to give up, and now, ill, is justly required to pay for his stupidity: this case is what Rosa Dias and Jones have in mind? And what if he stops smoking, at the first attempt, before the illness come: he does not pay at all except for the low cost of his effort?

Summarizing the above examples:

- The first citizen pays twice, because of “bad initial circumstances”, and for an in-built characteristic “lack of will”;
- The second citizen does not pay because never face any “bad initial circumstance”;
- The third citizen does not pay because a “bad initial circumstance” is balanced by a later “favorable circumstance”;
- The fourth citizen pays once, either because he is “responsible” of his illness and he made no “effort” at all or because he made the (mild) costly effort of giving up and given the in-built characteristic “willful” succeeded in such an effort.

A helpful theoretical framework for the problem in question is the usual health production function. Assume three periods: $t-1$ before the illness come, t the illness insurgence, $t+1$ the health after care.

For a generic individual i (i is not reported for ease of notation), we have:

$$H_t = f(HS_{t-1}, Env_{t-1}, Con_{t-1}, Prev_{t-1}, Gen_t) \quad H_{t+1} = g(HS_t, Gen_t, Res_t)$$

The onset of illness period t is characterized by a function of arguments of the previous period: **HS** are health services used in the past, **Env** are the environmental factors, **Con** are the consumption habits, **Prev** are the prevention actions and **Gen** are the genetic inbuilt endowments. The after care period is instead a simple function of the health services utilized when ill, of the inbuilt genetic capacity of reaction of the individual and of a factor **Res**, called resilience, including also all the compliance/adaptation efforts of the individual.

Our task is to attribute part of the current state of health of the individual to factors that are beyond his control (call this part H_t^{Cir} , namely health determined by circumstances), and part to factors under his control (call H_t^{Eff} , effort component), so that:

$$H_t = f(HS_{t-1}, Env_{t-1}, Con_{t-1}, Prev_{t-1}, Gen_t) = H_t^{Cir} + H_t^{Eff}$$

In the opportunity-effort framework, we can roughly classify the above factors as pertaining either to the circumstances field or to the effort domain. Let’s say, that the factor **Gen** is to be considered a circumstance, being inbuilt, and the same holds for **Env**, that are environmental factors. Certainly to attribute to the effort domain are **Prev** and **Con**. More complex is the discussion for **HS** and **Res**. This rough classification, coherent with what Roemer² wrote (Roemer 2002) poses some problems:

- Genetic factors should include character, such as willful complexion: this means that, in the example of smoker not able to give up, we should not consider him as guilty for that;

² In his example, page 457 he says: “Let u be life expectancy, type (he divides individual in types according to different circumstances, n.d.r) be, again, the economic class of the parents of the individual, effort be a measure of ‘life-style quality’, in the sense of exercising, eating healthily, not smoking, and so on, and policy be some allocation of medical care services to the population.”

- Environmental factors can be considered circumstances in the childhood, but become a factor of (partial) choice later on: part of their effect is to be attributed to the effort domain;
- Prevention activities and consumption habits are effort factors if we do not consider that *bad circumstances* can generate them: this is the case of our smokers, that were forced by bad familiar and environmental circumstances to start smoking. Moreover such factors are often heavily correlated with education and income, so that the more disadvantaged are also those with worse habits/efforts. Finally, the discussion on the genetic factors highlights the difficulties to change such bad habits;
- Health services, in Roemer's framework, are neither circumstances nor effort factors, being rather a policy factor, determined in order to "level-the-playing-field", that in his example consist in equalizing life expectancies of different types, given that they have lived equally healthy life-styles (equal effort). This is, to our view, a simplistic approach, in that:

1. it does not consider the complex interplay between supply and demand. Take as example the supply induced demand: suppose that public sector is targeted to giving much to some individuals and few to others, judging on their effort (the amount to give for each type at a given effort level is inversely linked to the current productivity of health services for that type?); can we say that services demanded only because there is inducement of demand due to plenty of supply have the same productivity than others, or rather we should assume a productivity close to zero (wasted services)? Moreover, what about the implicit risk in every health service utilization? Portfolio approach postulates that individuals, in formulating their demand for health services, look both at returns from care and at risks: if we proxy effort by outcome, as Roemer's does, we miss completely the risk component;
2. we come to the central point about health services: can we distinguish, in their level, together with the policy component, also both a circumstances component and an effort component? If this is the case, as an input in the health production function we have something that should be in turn fractionated to permit to disentangle effort from circumstances component of health. Do consider the main driver of health services' use: *need*. In a traditional approach it is a *datum* for the individual, while in circumstances/effort approach need is partly unluckiness and partly own responsibility: suppose now that we use health services as a policy variable, giving more³ to individuals that have the higher effort component of need, punishing instead those that have a low effort component; we expect that in the next period, the health of the individuals that have been *rationed* because of their previous low effort, will be lower than that of individuals that have not been rationed, and lower than what it could have potentially been. We have⁴:

$$H^{Ac}_{t+1} = g(HS^{Rat}_t, Gen_t, Re s_t) < H^{Pot}_{t+1} = g(HS_t, Gen_t, Re s_t)$$

In the future, the needed health services for the individuals that have been rationed in the past, will be higher than those needed if they would not have been rationed, so that: $HS^{needed}_{t+2} > HS^{potentially\ needed}_{t+2}$: how do we consider the increase in the needed amount by the individual? If we consider that he is deserving treatment because of the unfortunate *circumstance* of being rationed in the past, we are only postponing, at an higher cost, what we could have done before if we treated him *in time*, if rather we stick to the belief that his increased need of today is still a consequence of his low *effort* in the past, we condemn the individual to a level of unmatched need that is growing in time, eventually we have that the share of unmatched need over the total

³ He same holds if rather than giving more we lower the price of services and/or the amount of financing required

⁴ H^{Ac} indicates actual level of Health that is experienced because of the receipt of HS^{Rat} , the rationed level of health services, H^{Pot} the potential level of health attainable if the individual would have received the full amount of needed health services HS

need is close to 100%, so that: $HS_{t+n}^{Rat} = 0 \Rightarrow H_{t+n}^{Ac} = 0$. Should we write this sentence to death?

3. Think now to a powerful, unjustified, driver of expressed need, namely moral hazard. Moral hazard is a source of concern for every policy maker, though, in the framework of effort/circumstances approach, its importance is boosted: in fact, if we do not ration any need, because of low effort, we bother of moral hazard only on efficiency ground, but if we ration somebody because of low effort and no moral hazard, giving the full amount plus moral hazard to high effort individuals, we violate also an equity condition. So it becomes of paramount importance to ascertain if there is any correlation between the effort behavior and the moral hazard behavior. Assume that effort is correlated to education and income, in that educated and rich individuals have higher prevention components and better consumption habits: do we expect that the same factors are also those explaining moral hazard, in that richer and more educated individuals demand, given the same need, more than poor and less educated individuals?
 4. Finally, what if we contrast the basis of effort/circumstances approach, contesting that there is any circumstance at all? Think to an antroposophic view of men, that living repeated lives, *chooses*, for every life, the environment and the parents (and so the genetic components)? Moreover, as the *karma* law holds, nearly every bad circumstance is both deserved and wanted because of bad behavior in past lives.
- Finally, we have to speak about the factor called *resilience*. It encompasses two distinct components:
 1. The first component, that can be called *strength*, is independent from human will, and from effort, being rather a genetic predisposition to *react* to illnesses, requiring less or more services to combat both the physical and the psychological aspect of diseases. It can be seen as a *circumstance*;
 2. The second component, that we can call either habituation or adaptation, has instead a distinct *effort* flavor, in that summarize all the *costly* behaviors of the individuals enacted to face illnesses, as rehabilitation efforts, fight against depression, strict compliance, etc. Such efforts can be seen as equally *deserving* as those enacted in the past, as prevention activities and good consumption habits, and should be considered. It could be the case, in fact, that we give services to high effort individuals that turn out to be unproductive because they do not adapt, while we deny them to low effort individuals that instead would strongly adapt. It becomes important to scrutinize if we can expect a strict direct correlation between past effort and adaptation, or rather if we face an inverse relationship between past effort and adaptation because a will to *repair* to past errors: we believe the inverse correlation more credible, because often people that made all efforts to prevent illnesses, when hit, tend to believe to be a victim of unluckiness and tend to depress themselves.

Looking at the above arguments, it seems to us that they have in common the problem of *time*. Time enter in the circumstance/effort framework in some distinct ways.

First, time is important to discriminate when we can speak of circumstances rather than effort: being a smoker for a few years, as an example, do not portrait a risky behavior, and it is too short a period to assess if effort to give up has been successful or not. Could we say as a general rule that the more we broaden the range of time the more circumstances become efforts?. This is the case for the point 4 above, that looking at many subsequent lives do have to consider nearly each circumstance a *will*, having to do with the effort category. But this is also the case for a single life, when we say that often an individual with a risky behavior had plenty of time to change his bad habit. Contrary to this view is instead the fact that if we consider the entire life span of individuals, we find that bad circumstances in the childhood heavily influence health in later years (Case et al. 2002): this is the case of children from low income families, that show higher morbidity and gravity of illnesses also

in adulthood. Roemer's *types* are chosen according to the same line of thought, in that the economic class of parents is considered as the grouping variable.

Second, time is important to decide the timing of *punishment* for a low effort, as in point 2 (health services discussion) above: should we punish a bad behavior *once for all*, so that punished past low effort, cancels the responsibility of individual for illnesses coming later on, or should we rather decide that low efforts, and the same punishment do not cancel responsibility, so that lack of care because of punishment is not a circumstance but still a consequence of low effort?

Third, time is also relevant for the moral hazard argument of point 3. The unfairness of treatment between low effort individuals and those with moral hazard (if not punished) can in fact be reduced to a different treatment of ex-ante and ex-post moral hazard: if we define, in fact, ex-ante moral hazard as lack of prevention and presence of risky behavior because of insurance, and ex-post moral hazard as overconsumption due to the same insurance, we see that effort/circumstances approach tend to sanction the first, being rather neutral towards the second.

Fourth, the effort/circumstances approach seems to force the individual to adopt an intertemporal approach to health conditions (see also point 1 of health services), rather than a short term, adaptive approach, by lowering the price/availability of care risk to compensate for the increased risk in the outcome/forecasting: in fact, the intertemporal approach, by taking account of present behavior on future health, is heavily subject to forecasting errors, but, as it configures a correct prevention behavior, guarantees also that individuals would not face rationing or increased prices for services when needed; in contrast, individuals not caring of own behavior and suddenly facing an illness, could find increased costs or rationing in services' usage, because of their past behavior. Is there a normative interest in resurrecting Grossman's approach to the demand of services?

Fifth, the adaptation behavior, poses another puzzle regarding the equivalence of *past* effort and *current* effort: why we do believe the first to be superior to the other? If we take equally account of both we end up with at least four distinct groups: high past and high current efforts, high past and low current efforts, low past and high current efforts, low past and low current efforts. Do we believe that the second and the third group should face the same access to and the same cost of services or not? But what if we have already discriminated use according to past effort?

All in all, the above discussion on *time* can be summarized as such: as time passes also circumstances are changing, so that if we want to analyze effort we should allow for changing circumstances, while if we want to stick to given circumstances effort is hardly measurable.

Of different health risks

Equity debate, not only the effort/circumstances approach, has always considered health risk as a single dimension variable. The horizontal equity measurement centered on the concept of equal treatment for equal need, has proxied need with illness, standardizing for age and sex to take account of different composition of poor and rich groups. The fair innings approach do favor young because of the higher productivity of health services for young age groups and because old age people already got a fair treatment. The effort/circumstances approach, implicitly, unless it standardizes for age, should favor the oldest, because of higher time span available to adopt healthy habits⁵.

In any case, health risk of young/adult is not seen, in the above approaches, as distinct from the health risk of old age people : their illnesses are deemed comparable.

This is not so, in that the health risk of a retired person, is *not comparable* with that of a just graduated guy. The corollary is: if the risks are different, the insurances that cover them should be different and the equity criteria dealing with the two risks should be different too.

Why?

⁵ It is common knowledge that we are more concerned with bad habits when we grow older, because of the increasing fear (of cancer if smoking, of stroke if eating salty and fat, and so on).

Think to the two categories of risks mentioned in the introduction:

- Health risks in the childhood and the working age, mainly acute care risks with a fraction of chronic illnesses characterized by low lethality.
- Health risks in old age, calling for long term care and for palliative care before death.

Let's start with childhood and working age risk. Its main features are:

1. Productivity⁶ of care from medium to high, because of the kind of illnesses (mainly acute), of the young age and strong ability to benefit of patients, of the expected long time span on which the benefits of care maintain their validity: the individuals pass the test of need from the supply point of view;
2. Some risk of moral hazard, reduced only in the cases where there is an immediate risk of life;
3. Average⁷ probability of illness, positive but less than one, so that we can finance care for ill with payments coming from healthy people, as in a private insurance case;

The second risk, namely the old age risk is completely different:

1. The productivity of care is low, because the illnesses are often chronic, leading to death, the individuals have low ability to benefits and a short time span to enjoy the results of the care: the test of need from the supply point of view is not passed;
2. The risk of moral hazard is high, being correlated with the high risk of illness and the low efficacy of care, except for the immediate risk of life;
3. Average probability of illness is high and close to one, anticipating problems of financing, unless a sufficient accumulation of resources had been undertaken in the past;

It can be shown that the concepts of equity should be different in the two cases.

The main equity concern, regarding the first type of risk, is that we should not allow that income shortage prevents anybody from consuming services when needed: the field is then an equitable financing of the insurance covering such a risk. A private insurance, though in principle feasible because of the average probability of illness and the implied redistribution from healthy people to ill person, does not pass the equity test, in that somebody cannot be insured and the poor, unless subsidized, cannot afford to pay the premium. This is not to say that equity concerns from the side of the delivery of services are not present, but that, in advanced countries, discrimination among different individuals being entitled to benefits is not common practice, stemming from other kind of barriers, mainly demand driven, such as education, not easily amendable by means of a simple public help.

Take instead the second case: the long term care, being in principle not easily financed privately because of the high risk of illness⁸, poses less problems from the financing point of view, in that a public intervention is needed; instead, from the delivery side, care cannot be justified from a supply side point of view (productivity of care) as palliative/before death care is by definition unproductive⁹, and is open the road for discriminating, lacking sufficient resources, against disadvantaged groups (seen as less *needy* in a somewhat arbitrary way).

Before a more in depth analysis of the issues involved, let's imagine what happens if, as it is the case now, we fail to disentangle the two risks and we put together young and old in a common public assistance plan:

- We have to choose to give services to young rather to old, creating the unpleasant trade-off known as *fair innings*; this, in turn, generates a strong feeling of *intergenerational* inequity in older, previously healthy, groups, that have contributed to the financing of the system

⁶ We could speak either in term of efficacy of care or of cost-effectiveness of care

⁷ Taking account (averaging) of the unitary probability of chronic ill, and of the low probability of acute illnesses, though in some cases there is a catastrophic expenditure for facing them

⁸ Do recall that, even in the U.S., care to old age people is guaranteed through the public program *medicare*

⁹ We stick here to a strict medical point of view

throughout their life without using services and now that, as sick old, deserve services, are somewhat rationed;

- We tend to split the equity analysis in horizontal equity in the delivery side, vertical equity in the financing side and equal/fair health for everybody, as in the financing arena we are left only with the current income criteria (past contribution is ruled out), in the delivery side we are left only with the need criteria (current illness) and in the health side we have a blend of good luck in past life and productivity of care as criteria of a fair health condition;
- It is open the field for the *ethical* approach effort/circumstances that tries to qualify need criteria, in the delivery side, and income criteria, in the financing side, in order to reduce need and to increase financing for low effort individuals (with the untold consequence of lowering also further their health with respect to high effort individuals).

The failure of taking account of intergenerational equity, the lack of an integrated concept for equity in the delivery and equity in the financing, the space left for the misleadingly ethical concept of effort/circumstances, is to our view dependent from the original sin of failing to take account that in the health care field we are not speaking of the same thing when we have to cure a young/adult or an old.

The points of criticism to the effort/circumstances approach are as follows:

1. It is of reduced applicability to the young/adult insurance system, in that the risk factors had not the time to act in compromising health, in that the nature of illnesses involved (mainly acute) make them highly unpredictable and unexplainable, in that we should give effort the time to succeed;
2. It is based on hidden assumptions that compromise its possible application on equity grounds to the old age insurance system:
 - It overlooks the fact that old age insurance, not productive on medical ground, is nonetheless productive on psychological grounds: its nature is then similar to the pension system, in that entitles individuals to a pure consumption of resources without any concern for the investment components of them. On such a ground, past contribution to the financing of the health care system, possibly without a correspondent use of services is *in se*, on intergenerational equity grounds, a sufficient criteria for the fruition of services up to the capitalized amount of unspent contribution, without a need for the effort/circumstance qualifier;
 - The effort/circumstance framework muddles the water even as a criteria for distributing benefits *beyond* the level that should be guaranteed on the basis of capitalized past contributions. Suppose, in fact, that an individual has exhausted the services that he is entitled to receive on the basis of its past contributions: what we can expect?

If, as is common trend, the poor is more ill than rich there is a puzzle on equity ground: the poor has contributed less to the financing, so he exhausts benefits before than the rich, he then *needs* more benefits accorded on effort/circumstances grounds but it can be shown that he is often a low effort one. He is the first to be rationed and possibly have a shorter life.

If, on equity grounds, we allow a solidarity contribution from rich, we could have the case that poor and rich have the same amount of entitled benefits when old, but the *expected* use of services is still higher for the poor: we are back to the same puzzle, though to a milder extent.

If, to be highly ethical, we allow a financing of old age insurance based on *progressive*, contributions, invoking the diminishing marginal utility of income, and a delivery of services based on *justified* need¹⁰, we feel ethically *à l'aise* but we still penalize poor, we incur in the objections seen in the previous paragraph and we are subject to a still more subtle contradiction: in the effort/circumstance approach there is no room for

¹⁰ The justification coming from high effort

progressivity in the financing as income *should* be seen as *deserved* because of *high effort*¹¹.

The road open to solve the above puzzles are either to (partially) abandon the approach effort/circumstances, by complementing/substituting it with other criteria, or to find a new operational criteria for effort that has not to do with habits and prevention.

The first road has its appeal. In an experimental approach we asked to two classes of university students the following question: “*Suppose you are in old age and you have exhausted the resources you were entitled to receive on the basis of past contributions, on which ground you believe to have title of preference for receiving further benefits?*”.

The results are summarized in the following table¹²:

Table 1 -Criteria for allocating extra resources (0-1 scale)		
	Average score 1st class	Average score 2nd class
Age (years)	25.63636364	47.13043478
Sex (male 1, female 2)	1.545454545	1.173913043
Social class parents (1=low,2=middle,3=high)	2	2.272727273
Because of immediate risk of life	0.266057149	0.221681467
Because of expected efficacy of care	0.37712216	0.421727598
Because of relative young age	0.157503262	0.18337562
Because of low current income	0.169357915	0.036120401
Because of healthy life style and habits in the past	0.029959514	0.105160881
Other	0	0.031934033

The results show a difference in the average preference scores of the two classes that were very different in age, in sex composition, though not in the social class of the parents. The single more important factor for being accorded a preference in the distributions of extra funds/benefits is “*efficacy of care*”, to our view unsurprisingly: when you have received what you deserve, you can receive additional care only if you *need* it from a supply point of view, namely if the marginal productivity of resources devoted to you is greater than zero. Follows the immediate risk of life, and third is the relative young age. Unsurprisingly, moreover, the youngest class give to the “*effort*” variable healthy life style a tremendously low score, while the oldest one starts to give to the effort variable a 10% of preference¹³. Income is quite important for youngest class and less important for oldest one.

In the light of previous results, the complete abandon of effort considerations in equity analysis is not completely unjustified, but if we want just to complement the effort/circumstances framework, with other considerations, in order to distribute benefits beyond entitlements, then the *productivity* of received care should be the preferred one: in so doing, though, we worsen the poor situation, in that rich is also more educated, has a better production function of health and probably more favorable outcomes.

The second road is to find a proxy for effort that is viable empirically and that limits the shortcomings mentioned up to now.

Our suggestion is the following: to substitute the concept of *past* effort with that of *current* effort. We told that past effort is represented by healthy life and consumption habits, while current effort by adaptation: adaptation, in turn, permits to reach a better outcome utilizing less resources. Our operational measure of effort is then the consumption of health care services for day of illness (weighted to take account of different types of services) in old age program: the underlying

¹¹ In other words own income has always to be considered as an effort variable rather than a circumstances’ one.

¹² Individuals were asked to give a percentage score to every motivation, not just to choose the more important or the preferred 2 or 3: the average score is then obtained by simply averaging the percentage scores given by each student to each motivation.

¹³ It should be stressed, moreover, that the oldest class was composed by individuals that had to deal with prevention behavior in the course of their current work.

hypothesis is that individuals consuming less are both doing more efforts and are certainly not moral hazard prone.

The objections, of course are mainly two:

1. we should take account carefully of different gravity of illnesses, otherwise we consider high effort individuals just those facing less grave illnesses;
2. we tend to favor the individuals that have other components of the production function of health more favorable, such strength (that does not require effort), environment, etc. As we suspect that the rich has such components more developed, we tend to favor rich.

Nonetheless, if we trust the hypothesis that current effort has a negative relationship with past effort, we could favor the poor, that overlooked efforts in the past but strongly adapt once ill.

Conclusions

In the paper we tried to throw water on the firing enthusiasm for the effort/circumstances approach in the equity field, by simply recalling that effort is not easily measurable and in limiting the scope of its application to old age care. We pointed both at conceptual difficulties and at practical shortcomings in the application of the approach.

To our view most of the problems with the approach stem from the fact that equity analysis suffers from schizophrenia, in that it has always kept separated the issues of equity in financing, in the delivery and in health: such separation does not permit to have a meaningful concept of effort. In fact, effort is: 1) the basis of income, that in turn is the basis of financing, 2) the basis of habits, that affect health and consumption, 3) the basis of adaptation, that affects consumption too 4) lack of effort can be seen as the basis of moral hazard. Moreover, as equity students have failed up to now to address meaningfully the field of intergenerational equity, the confusion between different health risks and needed insurance arrangements is still there.

A piece of evidence suggests to explore how to complement effort/circumstances approach with other considerations, such efficacy of care.

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