Considerations:

* Decent Living Standards (Rao)
* Social Progress Index indicators
* Max-Neef’s philosophy of needs and satisfiers

Postulates:

* We are assessing how well needs are satisfied. We need to be consistent.
* “Satisfiers are what render needs historical and cultural, and economic goods are their material manifestation.”
* A satisfier is “the way in which a need is expressed”
* Satisfiers “are modified according to the rhythm of history and vary according to culture and circumstance.”
* Satisfiers “are forms of Being, Having, Doing, and Interacting related to structures”
* Ideally, measure objectively the degree to which the need is satisfied
* We may also measure the quantity of the satisfier, as long as the satisfier is universal (shared by all countries across time) and well-defined
* Subjective satisfaction relies heavily on expectations, which increase with increasing satisfaction – compare subjective satisfaction with political freedom between North Korea and the US
* We are interested not in whether people feel satisfied but whether they actually are

Subsistence

* Prerequisite for all other needs, as conceded by Max-Neef
* Concerned with supporting life at a minimum level: principally food, clean water, and shelter
* Life expectancy
* Excluded by Vita et al. due to low variance
* Healthy life expectancy
* Inverse fertility rate is not a good measure because children in families with many children may not receive adequate care
* A larger family does not mean a more meaningful life
* Deaths from malnutrition
* Housing Affordability Index
* Household overcrowding
* Improved water source (SPI)

Protection

* Two areas: (1) institutional protection of basic needs and (2) preventing physical or economic harm caused by special circumstances
* The prerequisites to life writ large are the domain of Subsistence
* Inverse homicide rate
* Inverse deaths from infectious diseases
* Inverse maternal mortality rate
* Along with infectious diseases, this is a function of medical care
* Proportion of population covered by social protection floors/systems (UNSDG)
* Coverage of essential health services (UNSDG)
* Improved sanitation (SPI)
* Inverse mortality rate from unsafe water, sanitation, or hygiene
* Access to electricity does not immediately imply greater protection but it does imply the degree to which services are modernized
* Electricity is therefore key to QOL
* Electricity is vital to many Decent Living Standards such as refrigeration, thermal comfort, and illumination
* Access to modern fuels is not as good of an indicator as deaths from indoor air pollution (SPI) because modern fuels do not necessarily provide protection; they only gain an implication of protection when contrasted with solid fuels

Creation

* Comprises not only technological and entrepreneurial innovation but also artistic creation
* Artist salary as a percentage of country-wide median salary
* Global Innovation Index

Affection

* “Belonging” as it relates to intimate and domestic environments
* Not matched to an economic good, according to Vita
* Inverse intimate partner violence rate (from SPI)
* Comparisons of marriage rates and divorce rates are only effective where marriage and divorce are subject to homogeneous legal barriers and societal norms
* Inverse suicide rate
* This has less to do with insufficient means of subsistence and more to do with an insufficient support system
* Proportion of children living with both parents
* See OECD family database: <https://www.oecd.org/en/data/datasets/oecd-family-database.html>
* Feelings of loneliness (subjective)
* % 1-person households might construe “affection” as “having an intimate partner”
* Number of friends per cap poses a challenge because some people may prefer to have a few close friends rather than many acquaintances

Freedom

* Distinguished from identity and participation:
* Identity is about culture, while freedom is about the ability to be different
* Participation is about affiliation in social/political groups, while freedom is about the ability to choose a social or political position
* Mobility
* Spatial autonomy
* Link between EVIOBASE3 economic goods (air and non-air mobility) and needs
* No indicator representing successful attainment of mobility, i.e. access to transportation
* Not just a defensive good to perform subsistence or leisure activities– mobility itself is a form of freedom
* Freedom of domestic movement from SPI
* Equality
* Elimination of disadvantage increases societal freedom
* Includes equality of political rights
* See Inclusiveness section of SPI
* See Freedom House
* Includes income equality
* We are not concerned with how income equality is attained, so we do not interact with the argument that income equality hurts the freedom of the rich because their money is taken away
* Freedom of expression index (V-Dem)

Identity

* Remove authenticity (subjective indicator)
* Living an authentic life is a form of Freedom
* Conforming to a group can still provide a sense of belonging and therefore satisfy the need for Identity
* “Prefer not to say” responses on diversity questionnaires
* Indicates discomfort with disclosing parts of identity
* Measures of cultural participation
* See UNESCO paper
* Rate at which immigrants are culturally assimilated
* Origin attachment index (<https://www.demogr.mpg.de/en/research_6120/digital_and_computational_demography_zagheni_11666/migration_and_mobility_11669/integration_and_segregation_11674/evaluating_immigrants_cultural_assimilation_by_using_digital_trace_data_6099/details>)
* Stateness from BTI

Leisure

* Intellectual curiosity
* ICS
* Levels of anxiety and stress
* Likely will have to rely on subjective survey data

Understanding

* Focusing on attainment of understanding rather than opportunities to attain understanding
* Schooling doesn’t necessarily mean learning
* Adult literacy rate
* Adult numeracy rate
* Digital problem-solving
* Note the PIAAC does not have data for low-income countries
* An alternative is the proportion of individuals using the Internet
* This is distinct from the proportion of individuals with access to the Internet
* PISA test scores
* Assesses 15-year-olds across 81 countries, 2000-2022
* Interesting but not relevant to measuring satisfaction of the Understanding need (they rather measure the quantity of the economic good that is targeted to Understanding)
* Ratio of (number of primary teachers with minimum required qualifications) over (population below 18)
* Education access

Participation

* Democracy index has too much overlap with freedom indicators
* Number of domestically based WANGO-affiliated NGOs per cap
* Voter turnout as a proportion of registered voters
* Ideally we would have VEP turnout but this doesn’t seem available
* Voter registration as a proportion of voter-age population (VAP)
* Political Participation and Political and Social Integration indicators from BTI
* EIU Democracy Index
* Breakdown of Freedom House’s Freedom in the World sub-indicators (if possible to obtain)
* Overlap with political rights from SPI (which is listed under Freedom)
* This can be specified by breaking the Personal rights component of the SPI into its constituent indicators

Summary of limitations of EXIOBASE3

* Covers the 44 large economies that make up 91% of global GDP and 65% of the world population – all other countries are aggregated into five “Rest of the World” regions
* SPI has 170 countries
* Is there a similar input-output database that is more comprehensive?
* Plan to explore databases – Eora and OECD
* Discount WIOD because it covers even fewer countries
* Complete data from 1995 to 2011 (inclusive), includes estimates based on auxiliary data from 2012 to 2022