Net Amount at Risk (NAR):

Definition: Net amount at risk is the difference between a claim amount payable if a specific event occurs and the amount set aside to support the claim.

NAR= Claim Amount – Amount Set Aside for the Claim

There are several ways the amounts in this equation can be determined with each alternative resulting in a different numerical value for the NAR.

Examples:

1. Universal life policies have account values from which mortality charges are deducted. The rate of mortality charge varies by age and risk classification and is applied to a NAR. The NAR is defined as the excess of the death benefit over the policy's account value.

   For example, a universal life policy has a death benefit equal to the face amount, $100,000, plus the account value, $10,000. In this case the death benefit is $110,000 and the account value is $10,000; therefore, the NAR is $100,000. For this policy the NAR will always equal the face amount. The current monthly rate of charge is 1 cent per $1000 of insurance for the owner of this policy, a female nonsmoker who is 36 years old. The mortality charge based on this NAR and this mortality rate of charge is one dollar: .01 x $100 = $1.00

2. NAR on life insurance policies can also be calculated in aggregate for a company as the difference between the total death benefits available from the company and the liability, or reserve, recorded in the company's financial statements to support the payment of death benefits.

   The reserves in financials prepared by a company for state insurance regulators, statutory reserves, are generally greater than reserves in financials prepared by the company for investors, GAAP reserves. Thus the NAR would usually be larger on a GAAP basis than a statutory basis. For example, a company has $52 billion of insurance in force, $1 billion of statutory reserves and $950 million of GAAP reserves. The NAR on a statutory basis would be $51 billion ($52 billion of insurance minus $1 billion of statutory reserve). The NAR on a GAAP basis would be $51.05 billion ($52 billion of insurance minus $.95 billion of GAAP reserve).

3. NAR is part of a formula that regulators use to determine the minimum capital needed to support a company's risk. The factors applied to the NAR decrease as the amount of risk increases because the average number of deaths is more predictable in a larger population. For the company in example 2, $55.3 million of capital is required for the mortality risk of life insurance. It is determined as follows:

Formula NAR	Company Amount	Factor	Capital Required
First $500 million	$500 million	.0023	$1.15 million
Next $4.5 billion	$4.5 billion	.0015	$6.75 million
Next $20 billion	$20 billion	.0012	$24.0 million
Over $25 billion	$26 billion	.0009	$23.4 million
Total	$51 billion		$55.3 million

4. The financial loss from a claim will depend on the NAR, potential tax savings from the claim, the expense of administering the claim and the liquidation value of the assets supporting the reserves. For example, a $1,000 claim for which $10 in reserves is held has an NAR of $990. However, when the claim occurs there is an additional expense of $5 to settle the claim. When the $10 in assets supporting the reserve is liquidated, the assets sell for $11 dollars. Finally, the whole transaction is subject to a 35% tax rate. The financial loss from the claim is calculated as follows:
   $646.1= ($1,000 claim + $5 expense -$10 reserve-$1 gain on sale of assets) x.65 tax effect.

An NAR for which no claim is made would provide a gain depending on how much is charged for the net amount at risk, the interest earned on the reserves and the taxes paid on gains. In aggregate *net amount at risk should not be viewed as a liability*. If events occur as expected, the premiums received from many policyholders plus the interest earnings on assets supporting reserves will be adequate to pay the claims of those policyholders that die. *NAR usually represents exposure to claims above expected*.

5. NAR can also be used for risks other than mortality. For example, in relationship to liquidity, NAR would be the benefit payments from possible surrenders, loans or other optional policyholder cash outflows minus a measure of funds available to meet such payments.

NAR can be a difficult measure to explain because the number can be large, in the billions in the example in 2, and because it is not a financial liability but an exposure to claims above expected. For example the factors in the table of example 3 are meant to capture amounts needed to pay claims in all but the worst 5% of cases. Thus, only about one thousandth of the NAR is needed to cover claims at the 95% level.

Finally, the NAR may not capture important aspects of the risk under consideration. For example, compare $100 million net amount at risk from one life insurance policy with $100 million net amount at risk from 1,000 policies. With one policy, claims will be much higher than expected a very small amount of time (when the policyholder dies) and zero at other times. With 1000 policies claims will not be "all or nothing", but closer to the expected amount. Thus the same NAR can represent different risks.

As of May 8, 2002, the following Internet addresses provide definitions of net amount of risk.
http://www.findalink.net/reinsurance/def-n.htm
http://www.federatedrural.com/ins-wds/nnn/n036.htm
http://free-online-term-life-insurance-quotes.com/Net-amount-at-risk.htm