Analisis portopolio optimal evaluasi kinerja dan proses manajemen porfolio aktif atas investasi saham : studi kasus dana pensiunan Bank Indonesia

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Abstrak

Di tahun 2008 ini, (1) tingginya harga minyak mentah dunia, (2) melemahnya ekonomi AS, dan (3) pengaruh krisis subprime mortgage menjadi ujian berat bagi pasar saham Indonesia. Kondisi ini menyebabkan bursa saham menjadi sangat fluktuatif. Lembaga keuangan, seperti perbankan, perusahaan investasi, perusahaan asuransi dan Dana Pensiun di Indonesia pun terkena dampak dari globalisasi pasar keuangan.

Dana Pensiun sebagai pengelola dana yang besar harus prudent atau menerapkan prinsip kehati-hatian dalam mengelola portofolio investasinya. Dana Pensiun Bank Indonesia (DAPENBI) merupakan Dana Pensiun terbesar keempat di Indonesia dengan dana kelolaan mencapai lebih dari empat triliun rupiah; sehingga sangat diperlukan pemahaman mengenai asset liability management (ALM) sekaligus memastikan bahwa investasi yang dilakukan sudah tepat dan efisien dalam rangka implementasi Good Pension Fund Governance (GPFG).

Investasi merupakan kegiatan utama DAPENBI, yang mana hasil investasinya menjadi sumber pendanaan bagi pembayaran manfaat pensiun. Kegiatan investasi memerlukan manajemen portofolio sebagai suatu proses yang berkelanjutan di mana: (1) tujuan (objective), batasan (constraint) dan preferensi untuk setiap investor diidentifikasi; (2) ekspektasi pasar modal atas ekonomi, industri dan sektor berikut sekuritas individualnya dipertimbangkan dan dikuantifikasi; (3) strategi dikembangkan dan diimplementasi; (4) faktor-faktor portofolio dimonitor; (5) portofolio disesuaikan (adjusled) pada tahap alokasi aset (assel allocation), optimalisasi portofolio (portfolio optimization) dan seleksi sekuritas (security selection); serta (6) kinerja portofolio diukur dan dievaluasi untuk memastikan pencapaian tujuan investor.

Penelitian ini menganalisis proses manajemen portofolio investasi saham untuk diterapkan pada DAPENBI. Diawali dengan pembentukan optimal risky portfolio menggunakan dua model penerapan teori portofolio (modern portfolio theory): (1) Markowitz's Full Covariance Model menghasilkan komposisi yang terdiri atas tujuh saham (AALI sebesar 33,74%, UNTR 20,63%, INCO 19,27%, BUMI 18,23%, SMCB 3,02%, ANTM 2,78% dan PTBA 2,33%), dengan Sharpe ratio sebesar 2,2089; lebih tinggi daripada (2) Sharpe's Single-Index Model yang terdiri atas enam saham (AALI 26,21%, BUMI 21,08%, INCO 19,24%, UNTR 15,81%, ANTM 11,70% dan PTBA 5,97%), dengan Sharpe ratio 2,1802.

Di tengah tingginya ketidakpastian (uncertainty), investor, dalam hal ini DAPENBI, tidak lagi dapat mengharapkan (expected) return-nya akan sama dengan average historical return (ex posi return) yang digunakan dalam dua model sebelumnya. Dua mode! tambahan (extension) digunakan untuk tujuan ini; multifactor (two-factor) model dan Black-Litterman (BL) Model. Keduanya memungkinkan investor untuk merevisi return dalam optimal risky portfolio menjadi expected (ex ante) return yang sesungguhnya (true value) karena (1) multifactor model meng-incorporate tinjauan eksternal atas faktor makroekonomi (factor views) berupa excess market dan ‘proyeksi’ kenaikan harga minyak dunia (forecasted' oil inflation), dan (2) BL Mode! meng-incorporate tinjauan pribadi (internal) investor (private views) atas faktor mikroekonomi

berupa ‘target/fair' price saham-saham dalam portofolio, yang menghasilkan updated expecled return saham, updated expected return portofolio, dan updated optimal risky portfolio; AALI sebesar 42,27%, ANTM 5,83%, BUMI 8,74%, INCO 9,23%, PTBA 17,35%, SMCB 0,51% dan UNTR 16,06%. Updated expected return portofolio menjadi sebesar 0,4302, standar deviasi portofolio 0,2982, dan Sharpe ratio 1,1744. Hasilnya, setelah sebelumnya risk aversion DAPENBI (A = 4) ditentukan melalui kuesioner, kemudian digunakan untuk menentukan optimal complete portfolio dengan porsi investasi pada risky asset sebesar 89,39% dan risk-free asset 10,62%.

Updated optimal risky portfolio diukur dan dievaluasi dengan menggunakan lima ukuran kinerja (performance measure) yang secara umum memberikan hasil yang baik; Sharpe ratio (SP sebesar 1,1744), Treynor ratio (TP 0,3432), Jensen alfa (aP 0,2123), R2 (A/TF 0,5299), kecuali Information Ratio (IR 0,2403); mengukur abnormal return per unit unsystemalic risk.

Manajemen ekspektasi dan persepsi pasar dilakukan dengan menggunakan Growth Value Matrix (GVM) yang berhasil memetakan 16 saham dalam sampel penelitian menjadi empat kelompok: excellent value managers (AALI, ASII, INCO, ISAT dan TLKM), expeclation builders (UNTR), tradilionalists (ANTM dan BBCA), dan asset-loaded value managers (BNBR, BUMI, INDF, INKP, KLBF, MEDC, PTBA dan SMCB).

Tahap terakhir adalah dengan melakukan simulasi investasi selama satu semester pertama tahun 2008, yang menunjukkan hasil bahwa pada saat portofolio pasar (IHSG) mengalami unrealized actual loss sebesar -14%, portofolio DAPENBI (dari komposisi saat ini) underperfonn dengan unrealized actual loss -18,20%. Sementara optimal risky portfolio mengalami unrealized actual gain 2,32% (outperform), dan setelah dilakukan penyesuaian (updated optimal risky portfolio) meningkat cukup signifikan menjadi 7,90% (outperform).

Penurunan harga (actual loss) pada hampir seluruh saham-saham LQ45 yang rata-rata mencapai 30%-50% selama periode simulasi (penurunannya diperkirakan masih akan berlanjut) menggambarkan kondisi pasar saham saat ini yang ‘sangat berisiko’ dengan volatilitasnya yang intense, sehingga menuntut investor untuk melakukan seleksi sekuritas (security seleclion) dan alokasi aset (asset allocation) dengan cermat berikut kehandalan manajemen portofolionya. Penelitian ini bermaksud mengakomodasi kebutuhan tersebut dan mencoba secara proaktif memberi solusi praktis atas permasalahan portofolio investasi saham yang DAPENBI (dan investor) hadapi.

.....This 2008, (1) the high price of crude oil, (2) the weakening ofUS economics, and (3) the effecl of the subprime mortgage crisis became the difficult exam for the Indonesian stock market. This condilion caused the stock exchange to become very fluduating. The financial institutions, like banking, investment firms, insurances and pension funds in Indonesia then were ajfected by what so called the financial market globalization.

Pension funds, as the large fund manager institutions, have t o prudent in managing its investment portfolios. Dana Pensiun Bank Indonesia (DAPENBI) the fourth largest pension fund in Indonesia by the management fund (wealth) up to four trillion rupiah; so it 's demandedfor the understanding about asset liability management (ALM), at the same time t o ensure that the investment that was done already appropriate and efficient in order to implement the Good Pension Fund Governance (GPFG).

Investment was the DAPENBI's core activity, whichever the results became the source of funding for pension payment. The investment activity needed the management of the portfolio as a continuous process where: (1) the objective, the conslraint, and preference for each investor was identified; (2) Capital market expectation on economics, industry and sedor along wilh the individual securities was considered and

quantified; (3) the strategy was developed and implemented; (4) portfolio factors were monitored; (5) the portfolio was adjusted by repeating the asset allocation, the portfolio optimization and the security selection steps; and (6) the portfolio performance was measured and evaluated t o ensure the achievement of the investor ’s objectives.

This research analyzed the portfolio management process of stock investment to be applied to DAPENBI. Started with the optimal risky portfolio construction using two models of the modern portfolio theory: (1) the Markowitz's Full Covariance Model produced the composition of seven stocks (AALI of 33.74%, UNTR 20.63%, INCO 19.27%, BUMI 18.23%, SMCB 3.02%, ANTM 2.78% and PTBA 2.33%), with the Sharpe ratio of 2.2089; higher than (2) the Sharpe 's Single-Index Model of six shares (AALI 26.21%, BUMI 21.08%, INCO 19.24%, UNTR 15.81%, ANTM 11.70% and PTBA 5.97%), with the Sharpe ratio 2.1802. Under the high uncertainty, the investor, in this case DAPENBI, no longer could expected its retur n will be the same as average historical retur n (ex pos t r e tur n) that was used in two models beforehand. Two additional (extension) models were used for this purpose; the multifactor (two-faclor) model and the Black-Littennan (BL) Model. Both of them enabled the investor to revise return in optimal risky portfolio to true value expected (ex ante) return because (1) the multifactor model incorporated the external views on the macroeconomics factor (factor views) take the form of excess market and forecasted' oil inflation, and (2) the BL Model incorporated the investor internal views (private views) on the microeconomics factor take the form of 'target/fam’ stock price in the portfolio, that produced the updated individual stock expected return, the updated portfolio expected return, and the updated optimal risky portfolio; AALI #42.27%, ANTM 5.83%, BUMI 8.74%, INCO 9.23%, PTBA 17.35%, SMCB 0.51% and UNTR 16.06%. The updatedportfolio expected return then to be #0,4302, the portfolio Standard deviation 0.2982, and the Sharpe ratio 1.1744.

The results above, after DAPENBI’s risk aversion (,4 = 4) was assessed through the questionnaire, afterwards was used to determine optimal complete portfolio with the portion ofinvestment in risky assets of89.39% andrisk-free assets 10.62%.

Updated optimal risky portfolio was measured and evaluated using five performance measures that generally gave good results; the Sharpe ratio (SP of 1.1744), the Treynor ratio (Tp 0.3432), Jensen alfa (aP 0.2123), R2 (V^0.5299), except Information Ratio (IR 0.2403); measured abnormal return per the unit of unsystematic risk.

The expectation and market perception management was performed using Growth Value Matrix (GVM), that mapped 16 stocks in the satnple to four groups: excellent value managers (AALI, ASII, INCO, ISAT and TLKM), expeclation builders (UNTR), traditionalists (ANTM and BBCA), and assels-loaded value managers (BNBR, BUMI, INDF, INKP, KLBF, MEDC, PTBA and SMCB).

The final step was by performing the inveslment simulation for first semester in 2008, that showed that at the time of the market portfolio (IHSG) experienced unrealized actual loss of -14%, the DAP Ebi BI’s portfolio (from the current composition) underperformed with unrealized actual loss -18.20%. Meanwhile, optimal risky portfolio experienced unrealized actual gain 2.32% (outperformed), and after the adjustment (updaled optimal risky portfolio), was increased significantly t o become 7.90% (outperformed).

The decline in the price (actual loss) in almost all of the LQ45 stocks that in average reached 30%-50% during the simulation period (the decline estimated still was continuing) depicted that the condition for the stock market at this time was ‘very risky’ with its intense volatility, demanding the investors to perform the security selection and the assets allocation precisely, along with their portfolio management reliability. This

research was aimed to accommodate such requirement and tried proactively to give the practical solution on the problem of the stock investment portfolio that DAPENBI (and the investor) faced.